

<b>Item</b>	<b>Occurences</b>	<b>Present In</b>
TNF	16	Fever, Pneumonia, Heart Disease, Kidney Disease, Lung Disease, Diabetes, Hypertension, Cancer, Sepsis, Acute Kidney Injury, Neutrophilia, Lymphopenia, Thrombocytopenia, Multiple Organ Failure, SARS-CoV, Viral Life Cycle
CXCL8	15	Cough, Fever, Dyspnea, Pneumonia, Kidney Disease, Lung Disease, Diabetes, Hypertension, Cancer, Sepsis, Neutrophilia, Leukocytosis, Thrombocytopenia, SARS-CoV, Viral Life Cycle
IL1B	13	Cough, Fever, Pneumonia, Heart Disease, Kidney Disease, Lung Disease, Diabetes, Hypertension, Cancer, Sepsis, Neutrophilia, Leukocytosis, Lymphopenia
IL6	13	Fever, Pneumonia, Heart Disease, Kidney Disease, Lung Disease, Diabetes, Hypertension, Cancer, Sepsis, Acute Kidney Injury, Neutrophilia, Thrombocytopenia, SARS-CoV
MMP9	13	Cough, Fever, Pneumonia, Heart Disease, Kidney Disease, Lung Disease, Diabetes, Hypertension, Cancer, Sepsis, Neutrophilia, Leukocytosis, Multiple Organ Failure
TGFB1	13	Cough, Fever, Dyspnea, Pneumonia, Heart Disease, Kidney Disease, Lung Disease, Diabetes, Hypertension, Cancer, Sepsis, Acute Kidney Injury, Thrombocytopenia
ACE2	12	Cough, Fever, Pneumonia, Heart Disease, Kidney Disease, Lung Disease, Diabetes, Hypertension, Sepsis, SARS-CoV, Viral Entry, Viral Life Cycle
CXCR4	12	Fever, Pneumonia, Lung Disease, Diabetes, Hypertension, Cancer, Sepsis, Neutrophilia, Lymphopenia, Thrombocytopenia, Viral Entry, Viral Life Cycle
EGFR	12	Cough, Fever, Dyspnea, Heart Disease, Kidney Disease, Lung Disease, Diabetes, Hypertension, Cancer, Acute Kidney Injury, Viral Entry, Viral Life Cycle
IL10	12	Fever, Pneumonia, Kidney Disease, Lung Disease, Diabetes, Hypertension, Cancer, Sepsis, Acute Kidney Injury, Lymphopenia, Multiple Organ Failure, SARS-CoV
NFKB1	12	Fever, Pneumonia, Heart Disease, Kidney Disease, Lung Disease, Diabetes, Hypertension, Sepsis, Acute Kidney Injury, Neutrophilia, Lymphopenia, SARS-CoV
CRP	11	Fever, Pneumonia, Heart Disease, Kidney Disease, Lung Disease, Diabetes, Hypertension, Cancer, Sepsis, Neutrophilia, Thrombocytopenia
SPP1	11	Fever, Pneumonia, Heart Disease, Kidney Disease, Lung Disease, Diabetes, Hypertension, Cancer, Sepsis, Acute Kidney Injury, Neutrophilia
STAT3	11	Cough, Fever, Pneumonia, Heart Disease, Kidney Disease, Lung Disease, Diabetes, Hypertension, Cancer, Sepsis, Lymphopenia
TLR4	11	Fever, Pneumonia, Kidney Disease, Lung Disease, Diabetes, Hypertension, Cancer, Sepsis, Acute Kidney Injury, Neutrophilia, Thrombocytopenia
ACE	10	Cough, Pneumonia, Heart Disease, Kidney Disease, Lung Disease, Diabetes, Hypertension, Cancer, Sepsis, SARS-CoV
APC	10	Fever, Pneumonia, Lung Disease, Diabetes, Hypertension, Cancer, Sepsis, Neutrophilia, Leukocytosis, Lymphopenia
CCL5	10	Fever, Pneumonia, Kidney Disease, Lung Disease, Diabetes, Cancer, Neutrophilia, Thrombocytopenia, SARS-CoV, Viral Life Cycle

CSF2	10	Cough, Fever, Pneumonia, Lung Disease, Diabetes, Hypertension, Cancer, Sepsis, Neutrophilia, Thrombocytopenia
DPP4	10	Fever, Kidney Disease, Lung Disease, Diabetes, Hypertension, Cancer, Sepsis, SARS-CoV, Viral Entry, Viral Life Cycle
F3	10	Fever, Pneumonia, Heart Disease, Kidney Disease, Diabetes, Hypertension, Cancer, Sepsis, Thrombocytopenia, Multiple Organ Failure
HLA-DRB1	10	Cough, Fever, Dyspnea, Pneumonia, Pulmonary infiltrate, Kidney Disease, Diabetes, Hypertension, Thrombocytopenia, SARS-CoV
HMGB1	10	Fever, Pneumonia, Kidney Disease, Lung Disease, Diabetes, Hypertension, Cancer, Sepsis, Lymphopenia, Multiple Organ Failure
IFNG	10	Fever, Pneumonia, Kidney Disease, Lung Disease, Diabetes, Hypertension, Cancer, Sepsis, Neutrophilia, SARS-CoV
MTOR	10	Fever, Pneumonia, Heart Disease, Kidney Disease, Lung Disease, Diabetes, Hypertension, Cancer, Sepsis, Thrombocytopenia
NFE2L2	10	Fever, Pneumonia, Heart Disease, Kidney Disease, Lung Disease, Diabetes, Hypertension, Cancer, Sepsis, Acute Kidney Injury
NOS2	10	Fever, Pneumonia, Heart Disease, Kidney Disease, Lung Disease, Diabetes, Hypertension, Cancer, Sepsis, Acute Kidney Injury
PPARG	10	Fever, Pneumonia, Kidney Disease, Lung Disease, Diabetes, Hypertension, Cancer, Sepsis, Acute Kidney Injury, Neutrophilia
TLR2	10	Fever, Pneumonia, Kidney Disease, Lung Disease, Diabetes, Hypertension, Sepsis, Acute Kidney Injury, Neutrophilia, Thrombocytopenia
TP53	10	Fever, Pneumonia, Kidney Disease, Lung Disease, Diabetes, Hypertension, Cancer, Acute Kidney Injury, Neutrophilia, Thrombocytopenia
VEGFA	10	Fever, Pneumonia, Heart Disease, Kidney Disease, Lung Disease, Diabetes, Hypertension, Cancer, Sepsis, Acute Kidney Injury
APOE	9	Fever, Pneumonia, Pulmonary infiltrate, Heart Disease, Kidney Disease, Diabetes, Hypertension, Thrombocytopenia, Viral Life Cycle
BCL2	9	Fever, Pneumonia, Kidney Disease, Lung Disease, Hypertension, Cancer, Sepsis, Thrombocytopenia, Viral Life Cycle
CAV1	9	Dyspnea, Pneumonia, Pulmonary infiltrate, Diabetes, Hypertension, Cancer, Sepsis, Viral Entry, Viral Life Cycle
CCL2	9	Fever, Pneumonia, Kidney Disease, Lung Disease, Diabetes, Hypertension, Sepsis, SARS-CoV, Viral Life Cycle
CCR5	9	Fever, Kidney Disease, Lung Disease, Diabetes, Hypertension, Sepsis, Acute Kidney Injury, Viral Entry, Viral Life Cycle
CTGF	9	Fever, Dyspnea, Pulmonary infiltrate, Heart Disease, Kidney Disease, Lung Disease, Diabetes, Hypertension, Sepsis
HGF	9	Fever, Pneumonia, Heart Disease, Kidney Disease, Lung Disease, Diabetes, Hypertension, Cancer, Thrombocytopenia
HMOX1	9	Fever, Pneumonia, Kidney Disease, Lung Disease, Diabetes, Hypertension, Cancer, Sepsis, Acute Kidney Injury
IL17A	9	Fever, Pneumonia, Kidney Disease, Diabetes, Hypertension, Cancer, Sepsis, Neutrophilia, Thrombocytopenia
IL18	9	Fever, Pneumonia, Heart Disease, Kidney Disease, Lung Disease, Diabetes, Hypertension, Cancer, Sepsis
IL1A	9	Fever, Pneumonia, Heart Disease, Kidney Disease, Lung Disease, Diabetes, Hypertension, Sepsis, Neutrophilia

IL1RN	9	Cough, Pneumonia, Heart Disease, Kidney Disease, Lung Disease, Diabetes, Hypertension, Sepsis, Neutrophilia
ITGB2	9	Fever, Pneumonia, Kidney Disease, Diabetes, Hypertension, Sepsis, Neutrophilia, Leukocytosis, Thrombocytopenia
MBL2	9	Fever, Pneumonia, Kidney Disease, Lung Disease, Diabetes, Hypertension, Sepsis, Thrombocytopenia, SARS-CoV
NLRP3	9	Fever, Pneumonia, Heart Disease, Kidney Disease, Lung Disease, Diabetes, Hypertension, Sepsis, Leukocytosis
NOS3	9	Pneumonia, Heart Disease, Kidney Disease, Lung Disease, Diabetes, Hypertension, Cancer, Sepsis, Acute Kidney Injury
PLG	9	Pneumonia, Kidney Disease, Lung Disease, Diabetes, Hypertension, Cancer, Sepsis, Acute Kidney Injury, Thrombocytopenia
TERT	9	Cough, Fever, Pneumonia, Kidney Disease, Lung Disease, Hypertension, Cancer, Lymphopenia, Thrombocytopenia
ADRB2	8	Cough, Dyspnea, Pneumonia, Kidney Disease, Lung Disease, Diabetes, Hypertension, Sepsis
ALB	8	Fever, Heart Disease, Kidney Disease, Diabetes, Hypertension, Sepsis, Acute Kidney Injury, Thrombocytopenia
APOB	8	Fever, Dyspnea, Heart Disease, Kidney Disease, Diabetes, Hypertension, Cancer, Sepsis
B2M	8	Heart Disease, Kidney Disease, Diabetes, Hypertension, Cancer, Acute Kidney Injury, Thrombocytopenia, SARS-CoV
CD44	8	Fever, Pneumonia, Lung Disease, Diabetes, Cancer, Sepsis, Acute Kidney Injury, Thrombocytopenia
CSF3	8	Pneumonia, Heart Disease, Kidney Disease, Lung Disease, Diabetes, Sepsis, Neutrophilia, Thrombocytopenia
EPO	8	Fever, Heart Disease, Kidney Disease, Diabetes, Hypertension, Cancer, Acute Kidney Injury, Thrombocytopenia
FAS	8	Fever, Kidney Disease, Diabetes, Cancer, Sepsis, Lymphopenia, Thrombocytopenia, Multiple Organ Failure
FN1	8	Fever, Kidney Disease, Lung Disease, Diabetes, Hypertension, Cancer, Sepsis, SARS-CoV
GABPA	8	Fever, Pneumonia, Heart Disease, Kidney Disease, Lung Disease, Diabetes, Cancer, Sepsis
GSTM1	8	Fever, Dyspnea, Pneumonia, Kidney Disease, Lung Disease, Diabetes, Hypertension, Neutrophilia
HAVCR1	8	Fever, Pneumonia, Kidney Disease, Diabetes, Hypertension, Acute Kidney Injury, Viral Entry, Viral Life Cycle
HIF1A	8	Pneumonia, Heart Disease, Kidney Disease, Lung Disease, Diabetes, Hypertension, Cancer, Sepsis
ICAM1	8	Fever, Pneumonia, Kidney Disease, Diabetes, Hypertension, Sepsis, Viral Entry, Viral Life Cycle
IGF1	8	Pneumonia, Heart Disease, Kidney Disease, Lung Disease, Diabetes, Hypertension, Cancer, Acute Kidney Injury
IL13	8	Fever, Pneumonia, Kidney Disease, Lung Disease, Diabetes, Hypertension, Cancer, Multiple Organ Failure
IL2RA	8	Fever, Pneumonia, Lung Disease, Diabetes, Cancer, Sepsis, Lymphopenia, Thrombocytopenia
IL4	8	Fever, Pneumonia, Kidney Disease, Lung Disease, Diabetes, Cancer, Sepsis, Neutrophilia
ISG20	8	Fever, Pneumonia, Lung Disease, Diabetes, Cancer, Sepsis, Lymphopenia, Viral Life Cycle

LCN2	8	Pneumonia, Kidney Disease, Lung Disease, Diabetes, Hypertension, Cancer, Sepsis, Acute Kidney Injury
MIF	8	Fever, Pneumonia, Kidney Disease, Lung Disease, Diabetes, Hypertension, Sepsis, Multiple Organ Failure
MIR21	8	Fever, Heart Disease, Kidney Disease, Lung Disease, Diabetes, Hypertension, Cancer, Sepsis
MPO	8	Pneumonia, Kidney Disease, Lung Disease, Diabetes, Cancer, Sepsis, Acute Kidney Injury, Neutrophilia
MTHFR	8	Dyspnea, Heart Disease, Kidney Disease, Diabetes, Hypertension, Cancer, Acute Kidney Injury, Thrombocytopenia
NQO1	8	Heart Disease, Kidney Disease, Lung Disease, Diabetes, Hypertension, Cancer, Sepsis, Acute Kidney Injury
PON1	8	Fever, Dyspnea, Heart Disease, Kidney Disease, Diabetes, Hypertension, Cancer, Thrombocytopenia
PTGS2	8	Fever, Pneumonia, Kidney Disease, Lung Disease, Diabetes, Hypertension, Cancer, Sepsis
SERPINE1	8	Fever, Pneumonia, Kidney Disease, Lung Disease, Diabetes, Hypertension, Sepsis, Multiple Organ Failure
SIRT1	8	Pneumonia, Heart Disease, Kidney Disease, Lung Disease, Diabetes, Cancer, Sepsis, Acute Kidney Injury
TLR3	8	Fever, Pneumonia, Kidney Disease, Lung Disease, Diabetes, Hypertension, Cancer, Sepsis
TSC1	8	Cough, Dyspnea, Pulmonary infiltrate, Kidney Disease, Lung Disease, Diabetes, Hypertension, Cancer
VDR	8	Fever, Pneumonia, Kidney Disease, Lung Disease, Diabetes, Hypertension, Cancer, Sepsis
AGER	7	Pneumonia, Kidney Disease, Lung Disease, Diabetes, Hypertension, Cancer, Sepsis
AGT	7	Pneumonia, Heart Disease, Kidney Disease, Diabetes, Hypertension, Sepsis, SARS-CoV
CASR	7	Fever, Dyspnea, Kidney Disease, Diabetes, Hypertension, Cancer, Leukocytosis
CFH	7	Fever, Pneumonia, Kidney Disease, Diabetes, Hypertension, Sepsis, Thrombocytopenia
CFTR	7	Fever, Pneumonia, Kidney Disease, Lung Disease, Diabetes, Cancer, Leukocytosis
COX2	7	Fever, Pneumonia, Lung Disease, Diabetes, Hypertension, Cancer, Sepsis
CR2	7	Fever, Pneumonia, Diabetes, Cancer, Lymphopenia, Viral Entry, Viral Life Cycle
CREBBP	7	Fever, Dyspnea, Pneumonia, Kidney Disease, Diabetes, Cancer, Sepsis
CXCL10	7	Fever, Pneumonia, Lung Disease, Diabetes, Neutrophilia, Thrombocytopenia, SARS-CoV
CYP1A1	7	Fever, Pneumonia, Heart Disease, Lung Disease, Diabetes, Hypertension, Cancer
EDN1	7	Heart Disease, Kidney Disease, Lung Disease, Diabetes, Hypertension, Sepsis, Acute Kidney Injury
F2R	7	Fever, Pneumonia, Lung Disease, Hypertension, Cancer, Sepsis, Thrombocytopenia
FOXP3	7	Fever, Pneumonia, Diabetes, Cancer, Sepsis, Lymphopenia, Thrombocytopenia
G6PD	7	Fever, Kidney Disease, Diabetes, Hypertension, Cancer, Sepsis, Acute Kidney Injury

GPT	7	Fever, Dyspnea, Diabetes, Hypertension, Lymphopenia, Thrombocytopenia, SARS-CoV
GSTP1	7	Dyspnea, Pneumonia, Kidney Disease, Lung Disease, Diabetes, Hypertension, Acute Kidney Injury
GSTT1	7	Fever, Pneumonia, Kidney Disease, Lung Disease, Diabetes, Hypertension, Cancer
IFNA1	7	Fever, Pneumonia, Lung Disease, Diabetes, Cancer, Thrombocytopenia, SARS-CoV
IFNA13	7	Fever, Pneumonia, Lung Disease, Diabetes, Cancer, Thrombocytopenia, SARS-CoV
IFNA2	7	Fever, Hypertension, Sepsis, Acute Kidney Injury, Thrombocytopenia, Viral Entry, Viral Life Cycle
IL15	7	Fever, Pneumonia, Lung Disease, Hypertension, Cancer, Neutrophilia, Lymphopenia
IL2	7	Fever, Pneumonia, Diabetes, Cancer, Sepsis, Lymphopenia, SARS-CoV
JAK2	7	Heart Disease, Hypertension, Cancer, Neutrophilia, Leukocytosis, Coagulopathy, Thrombocytopenia
LAMC2	7	Fever, Dyspnea, Pneumonia, Hypertension, Cancer, Sepsis, Thrombocytopenia
LDLR	7	Fever, Dyspnea, Diabetes, Hypertension, Cancer, Viral Entry, Viral Life Cycle
LEP	7	Fever, Heart Disease, Kidney Disease, Diabetes, Hypertension, Cancer, Sepsis
LGALS1	7	Fever, Diabetes, Hypertension, Cancer, Sepsis, Viral Entry, Viral Life Cycle
MOK	7	Pneumonia, Kidney Disease, Lung Disease, Diabetes, Hypertension, Cancer, Sepsis
MS4A1	7	Fever, Pneumonia, Kidney Disease, Diabetes, Cancer, Lymphopenia, Thrombocytopenia
MYD88	7	Fever, Pneumonia, Heart Disease, Hypertension, Cancer, Sepsis, Lymphopenia
NR1I2	7	Fever, Pneumonia, Lung Disease, Diabetes, Hypertension, Sepsis, Thrombocytopenia
NR3C1	7	Fever, Pneumonia, Lung Disease, Diabetes, Hypertension, Cancer, Sepsis
PIK3CA	7	Fever, Pneumonia, Heart Disease, Diabetes, Hypertension, Cancer, Sepsis
PIK3CB	7	Fever, Pneumonia, Heart Disease, Diabetes, Hypertension, Cancer, Sepsis
PIK3CD	7	Fever, Pneumonia, Heart Disease, Diabetes, Hypertension, Cancer, Sepsis
PIK3CG	7	Fever, Pneumonia, Heart Disease, Diabetes, Hypertension, Cancer, Sepsis
PLA2G1B	7	Pneumonia, Kidney Disease, Lung Disease, Diabetes, Hypertension, Cancer, Sepsis
POMC	7	Dyspnea, Pneumonia, Kidney Disease, Lung Disease, Diabetes, Hypertension, Sepsis
RAG1	7	Pneumonia, Kidney Disease, Hypertension, Cancer, Sepsis, Lymphopenia, Thrombocytopenia
SELPLG	7	Fever, Pneumonia, Diabetes, Hypertension, Sepsis, Viral Entry, Viral Life Cycle
SLC52A2	7	Fever, Pneumonia, Lung Disease, Sepsis, Thrombocytopenia, Viral Entry, Viral Life Cycle

SOCS3	7	Fever, Pneumonia, Kidney Disease, Diabetes, Cancer, Sepsis, Thrombocytopenia
SOD2	7	Heart Disease, Kidney Disease, Lung Disease, Diabetes, Hypertension, Cancer, Sepsis
THBD	7	Fever, Heart Disease, Kidney Disease, Hypertension, Cancer, Sepsis, Thrombocytopenia
TSC2	7	Cough, Dyspnea, Pulmonary infiltrate, Kidney Disease, Lung Disease, Diabetes, Cancer
VWF	7	Heart Disease, Kidney Disease, Diabetes, Hypertension, Sepsis, Coagulopathy, Thrombocytopenia
ABCA1	6	Heart Disease, Kidney Disease, Diabetes, Hypertension, Neutrophilia, Thrombocytopenia
ABO	6	Cough, Heart Disease, Lung Disease, Diabetes, Hypertension, Thrombocytopenia
ADA	6	Pneumonia, Lung Disease, Diabetes, Hypertension, Cancer, Lymphopenia
ADM	6	Fever, Heart Disease, Kidney Disease, Diabetes, Hypertension, Sepsis
ALDH2	6	Heart Disease, Lung Disease, Diabetes, Hypertension, Cancer, Lymphopenia
ALOX5	6	Pneumonia, Hypertension, Cancer, Sepsis, Thrombocytopenia, Multiple Organ Failure
ANPEP	6	Fever, Diabetes, Hypertension, SARS-CoV, Viral Entry, Viral Life Cycle
APOA1	6	Pneumonia, Kidney Disease, Diabetes, Hypertension, Sepsis, Neutrophilia
APRT	6	Fever, Pneumonia, Diabetes, Hypertension, Cancer, Sepsis
ATM	6	Fever, Kidney Disease, Diabetes, Hypertension, Cancer, Lymphopenia
C3	6	Fever, Pneumonia, Diabetes, Hypertension, Acute Kidney Injury, Viral Life Cycle
CAT	6	Heart Disease, Kidney Disease, Lung Disease, Diabetes, Hypertension, Cancer
CCR2	6	Fever, Pneumonia, Kidney Disease, Diabetes, Hypertension, Sepsis
CD86	6	Fever, Pneumonia, Diabetes, Sepsis, Viral Entry, Viral Life Cycle
CDKN1A	6	Fever, Kidney Disease, Lung Disease, Diabetes, Hypertension, Cancer
CDKN2A	6	Fever, Kidney Disease, Lung Disease, Diabetes, Hypertension, Cancer
COX8A	6	Pneumonia, Kidney Disease, Hypertension, Sepsis, Coagulopathy, Thrombocytopenia
CTLA4	6	Cough, Fever, Pulmonary infiltrate, Kidney Disease, Diabetes, Cancer
CXCL12	6	Pneumonia, Diabetes, Cancer, Sepsis, Neutrophilia, Thrombocytopenia
CXCL2	6	Fever, Pneumonia, Lung Disease, Hypertension, Sepsis, Neutrophilia
CXCL5	6	Fever, Pneumonia, Lung Disease, Diabetes, Hypertension, Neutrophilia
DECR1	6	Pneumonia, Lung Disease, Diabetes, Hypertension, Cancer, Sepsis
F5	6	Fever, Dyspnea, Diabetes, Hypertension, Sepsis,

		Thrombocytopenia
FCGR3A	6	Fever, Pneumonia, Kidney Disease, Cancer, Sepsis, Lymphopenia
FOS	6	Fever, Pneumonia, Lung Disease, Hypertension, Cancer, Sepsis
HFE	6	Fever, Heart Disease, Kidney Disease, Diabetes, Hypertension, Cancer
HPGDS	6	Pneumonia, Heart Disease, Lung Disease, Diabetes, Hypertension, Cancer
HSPA1A	6	Pneumonia, Diabetes, Cancer, Acute Kidney Injury, Viral Entry, Viral Life Cycle
HSPD1	6	Fever, Pneumonia, Lung Disease, Diabetes, Hypertension, Sepsis
IL33	6	Fever, Pneumonia, Kidney Disease, Lung Disease, Cancer, Sepsis
INS	6	Fever, Kidney Disease, Diabetes, Hypertension, Acute Kidney Injury, Lymphopenia
ITGAM	6	Fever, Kidney Disease, Diabetes, Hypertension, Sepsis, Neutrophilia
KNG1	6	Cough, Kidney Disease, Diabetes, Hypertension, Sepsis, Acute Kidney Injury
KRAS	6	Fever, Lung Disease, Diabetes, Cancer, Leukocytosis, Coagulopathy
LTBR	6	Fever, Kidney Disease, Diabetes, Sepsis, Neutrophilia, Thrombocytopenia
MAPK1	6	Fever, Pneumonia, Heart Disease, Cancer, Sepsis, SARS-CoV
MAPK3	6	Fever, Pneumonia, Lung Disease, Cancer, Sepsis, Neutrophilia
MBL3P	6	Pneumonia, Kidney Disease, Lung Disease, Diabetes, Sepsis, SARS-CoV
MMP2	6	Kidney Disease, Lung Disease, Diabetes, Hypertension, Cancer, Sepsis
MYLK	6	Pneumonia, Heart Disease, Lung Disease, Hypertension, Sepsis, Lymphopenia
PARP1	6	Pneumonia, Kidney Disease, Diabetes, Hypertension, Cancer, Sepsis
PON2	6	Dyspnea, Heart Disease, Kidney Disease, Diabetes, Hypertension, Neutrophilia
PPARA	6	Fever, Heart Disease, Kidney Disease, Diabetes, Hypertension, Cancer
PPIA	6	Fever, Diabetes, Hypertension, SARS-CoV, Viral Entry, Viral Life Cycle
PRKN	6	Fever, Lung Disease, Diabetes, Cancer, Sepsis, Viral Life Cycle
PTX3	6	Kidney Disease, Hypertension, Cancer, Sepsis, Viral Entry, Viral Life Cycle
REN	6	Cough, Fever, Heart Disease, Kidney Disease, Diabetes, Hypertension
RETN	6	Heart Disease, Kidney Disease, Diabetes, Hypertension, Cancer, Sepsis
S100A1	6	Fever, Pneumonia, Diabetes, Hypertension, Cancer, Sepsis
SCARB2	6	Fever, Kidney Disease, Hypertension, Thrombocytopenia, Viral Entry, Viral Life Cycle
SELE	6	Fever, Diabetes, Hypertension, Cancer, Sepsis, Neutrophilia
SELP	6	Pneumonia, Heart Disease, Diabetes, Hypertension, Sepsis, Thrombocytopenia
SEMA6A	6	Fever, Heart Disease, Hypertension, Cancer, Sepsis, SARS-CoV

SFTPC	6	Cough, Fever, Dyspnea, Pneumonia, Lung Disease, Hypertension
SLC11A1	6	Cough, Fever, Lung Disease, Diabetes, Sepsis, Acute Kidney Injury
SOD1	6	Dyspnea, Kidney Disease, Diabetes, Hypertension, Acute Kidney Injury, Lymphopenia
SPARC	6	Fever, Kidney Disease, Diabetes, Hypertension, Cancer, Thrombocytopenia
THBS1	6	Fever, Heart Disease, Kidney Disease, Diabetes, Hypertension, Cancer
TIMP1	6	Pneumonia, Heart Disease, Kidney Disease, Diabetes, Hypertension, Sepsis
TNFRSF1A	6	Pneumonia, Lung Disease, Diabetes, Hypertension, Sepsis, Leukocytosis
TRBV20OR9-2	6	Fever, Pneumonia, Diabetes, Cancer, Sepsis, Lymphopenia
TRIM21	6	Fever, Kidney Disease, Lymphopenia, Thrombocytopenia, Viral Entry, Viral Life Cycle
VCAM1	6	Fever, Pneumonia, Kidney Disease, Diabetes, Hypertension, Sepsis
XDH	6	Heart Disease, Kidney Disease, Hypertension, Sepsis, Thrombocytopenia, Multiple Organ Failure
ABCB1	5	Heart Disease, Kidney Disease, Hypertension, Cancer, Thrombocytopenia
ABCC1	5	Heart Disease, Diabetes, Hypertension, Cancer, Lymphopenia
ABCG8	5	Dyspnea, Kidney Disease, Diabetes, Hypertension, Coagulopathy
ACKR3	5	Pneumonia, Kidney Disease, Lung Disease, Hypertension, Cancer
ACTB	5	Fever, Heart Disease, Kidney Disease, Diabetes, Lymphopenia
ADAM17	5	Pneumonia, Kidney Disease, Hypertension, Sepsis, SARS-CoV
ADORA2A	5	Pneumonia, Lung Disease, Diabetes, Hypertension, Sepsis
ADRA2B	5	Kidney Disease, Lung Disease, Diabetes, Hypertension, Cancer
AHR	5	Pneumonia, Kidney Disease, Lung Disease, Hypertension, Cancer
AKR1B1	5	Fever, Pneumonia, Kidney Disease, Diabetes, Hypertension
AKT1	5	Fever, Kidney Disease, Diabetes, Hypertension, Cancer
ANGPT1	5	Pneumonia, Kidney Disease, Diabetes, Hypertension, Sepsis
ANGPT2	5	Heart Disease, Kidney Disease, Diabetes, Hypertension, Sepsis
ATN1	5	Fever, Diabetes, Sepsis, Lymphopenia, Thrombocytopenia
BAX	5	Pneumonia, Heart Disease, Diabetes, Hypertension, Acute Kidney Injury
BCL2L1	5	Heart Disease, Diabetes, Lymphopenia, Thrombocytopenia, SARS-CoV
BDKRB2	5	Cough, Lung Disease, Diabetes, Hypertension, Acute Kidney Injury
BIRC3	5	Fever, Pneumonia, Pulmonary infiltrate, Lung Disease, Neutrophilia
BMP4	5	Pneumonia, Lung Disease, Diabetes, Hypertension, Cancer
BRCA1	5	Pneumonia, Diabetes, Hypertension, Cancer, Sepsis
BRS3	5	Kidney Disease, Lung Disease, Diabetes, Hypertension, Cancer
C5AR1	5	Fever, Pneumonia, Kidney Disease, Lung Disease, Sepsis
CASP3	5	Fever, Diabetes, Hypertension, Cancer, Sepsis
CBLL2	5	Fever, Lung Disease, Diabetes, Cancer, Sepsis



CD209	5	Fever, Thrombocytopenia, SARS-CoV, Viral Entry, Viral Life Cycle
CD274	5	Fever, Pneumonia, Lung Disease, Diabetes, Cancer
CD36	5	Heart Disease, Kidney Disease, Diabetes, Hypertension, Thrombocytopenia
CD40LG	5	Pneumonia, Kidney Disease, Diabetes, Sepsis, Thrombocytopenia
CD80	5	Fever, Diabetes, Sepsis, Viral Entry, Viral Life Cycle
CD81	5	Fever, Pneumonia, Lymphopenia, Viral Entry, Viral Life Cycle
CEL	5	Cough, Pneumonia, Lung Disease, Diabetes, Neutrophilia
CLOCK	5	Pneumonia, Diabetes, Hypertension, Cancer, Sepsis
CLU	5	Kidney Disease, Diabetes, Hypertension, Cancer, Acute Kidney Injury
COPD	5	Cough, Pneumonia, Kidney Disease, Lung Disease, Hypertension
CST3	5	Fever, Kidney Disease, Diabetes, Hypertension, Acute Kidney Injury
CTSB	5	Fever, Lung Disease, Sepsis, Viral Entry, Viral Life Cycle
CXADR	5	Fever, Heart Disease, Cancer, Viral Entry, Viral Life Cycle
CXCR2	5	Pneumonia, Lung Disease, Hypertension, Sepsis, Neutrophilia
CXCR3	5	Pneumonia, Kidney Disease, Lung Disease, Diabetes, Hypertension
CXCR6	5	Kidney Disease, Lung Disease, Hypertension, Cancer, Viral Life Cycle
CYBB	5	Pneumonia, Kidney Disease, Diabetes, Hypertension, Sepsis
CYP2C9	5	Kidney Disease, Lung Disease, Diabetes, Hypertension, Acute Kidney Injury
DOCK8	5	Fever, Pneumonia, Diabetes, Cancer, Lymphopenia
EDNRA	5	Kidney Disease, Lung Disease, Diabetes, Hypertension, Cancer
EGF	5	Fever, Kidney Disease, Lung Disease, Hypertension, Cancer
EGR1	5	Fever, Kidney Disease, Lung Disease, Diabetes, Hypertension
EIF2AK4	5	Cough, Fever, Dyspnea, Hypertension, Viral Life Cycle
ELANE	5	Pneumonia, Lung Disease, Cancer, Sepsis, Neutrophilia
EP300	5	Dyspnea, Heart Disease, Kidney Disease, Hypertension, Cancer
ESR1	5	Fever, Kidney Disease, Diabetes, Hypertension, Cancer
F2RL1	5	Fever, Pneumonia, Lung Disease, Hypertension, Cancer
F7	5	Kidney Disease, Hypertension, Sepsis, Coagulopathy, Thrombocytopenia
FCGR2C	5	Fever, Pneumonia, Kidney Disease, Coagulopathy, Thrombocytopenia
FEV	5	Fever, Dyspnea, Pneumonia, Lung Disease, Neutrophilia
FGB	5	Heart Disease, Diabetes, Hypertension, Sepsis, Coagulopathy
FGF2	5	Fever, Heart Disease, Kidney Disease, Diabetes, Hypertension
FGFR2	5	Fever, Dyspnea, Hypertension, Cancer, Thrombocytopenia
FLNA	5	Lung Disease, Diabetes, Hypertension, Coagulopathy, Thrombocytopenia
FOSB	5	Fever, Pneumonia, Lung Disease, Hypertension, Sepsis
FST	5	Pneumonia, Lung Disease, Diabetes, Cancer, Sepsis
GH1	5	Kidney Disease, Diabetes, Hypertension, Cancer, Sepsis
GHR	5	Heart Disease, Kidney Disease, Diabetes, Hypertension, Cancer

GRK2	5	Heart Disease, Diabetes, Hypertension, Viral Entry, Viral Life Cycle
GSN	5	Lung Disease, Cancer, Sepsis, Viral Entry, Viral Life Cycle
GSTM2	5	Fever, Hypertension, Cancer, Acute Kidney Injury, Neutrophilia
HDAC3	5	Fever, Heart Disease, Lung Disease, Diabetes, Cancer
HLA-A	5	Fever, Kidney Disease, Diabetes, Thrombocytopenia, SARS-CoV
HLA-B	5	Fever, Diabetes, Hypertension, Sepsis, SARS-CoV
HLA-DPB1	5	Cough, Fever, Pneumonia, Pulmonary infiltrate, Diabetes
HP	5	Pneumonia, Diabetes, Hypertension, Sepsis, Acute Kidney Injury
HSPA1B	5	Pneumonia, Diabetes, Cancer, Viral Entry, Viral Life Cycle
HSPA4	5	Fever, Pneumonia, Hypertension, Cancer, Sepsis
HTR2A	5	Fever, Diabetes, Hypertension, Viral Entry, Viral Life Cycle
IFNB1	5	Fever, Lung Disease, Cancer, SARS-CoV, Viral Life Cycle
IFNL3	5	Fever, Kidney Disease, Diabetes, Thrombocytopenia, Viral Life Cycle
IL22	5	Fever, Pneumonia, Diabetes, Cancer, Sepsis
IL7	5	Fever, Pneumonia, Diabetes, Sepsis, Lymphopenia
ITGA2	5	Hypertension, Cancer, Thrombocytopenia, Viral Entry, Viral Life Cycle
ITGB1	5	Fever, Kidney Disease, Sepsis, Viral Entry, Viral Life Cycle
ITGB3	5	Cancer, Coagulopathy, Thrombocytopenia, Viral Entry, Viral Life Cycle
JUN	5	Fever, Pneumonia, Lung Disease, Hypertension, Sepsis
JUNB	5	Fever, Pneumonia, Lung Disease, Hypertension, Sepsis
JUND	5	Fever, Pneumonia, Lung Disease, Hypertension, Sepsis
KCNA3	5	Fever, Heart Disease, Diabetes, Hypertension, Cancer
KCNQ1	5	Heart Disease, Kidney Disease, Lung Disease, Diabetes, Hypertension
KRT20	5	Fever, Kidney Disease, Diabetes, Cancer, Thrombocytopenia
LGALS3	5	Fever, Heart Disease, Diabetes, Hypertension, Cancer
LGALS9	5	Fever, Pneumonia, Cancer, Viral Entry, Viral Life Cycle
LPA	5	Pneumonia, Heart Disease, Kidney Disease, Diabetes, Hypertension
LPAR2	5	Pneumonia, Kidney Disease, Lung Disease, Hypertension, Cancer
MAPK14	5	Fever, Pneumonia, Diabetes, Sepsis, SARS-CoV
MAPK8	5	Fever, Pneumonia, Diabetes, Hypertension, Cancer
MIR146A	5	Fever, Heart Disease, Diabetes, Hypertension, Sepsis
MMP1	5	Lung Disease, Diabetes, Hypertension, Cancer, Sepsis
MMP3	5	Pneumonia, Heart Disease, Diabetes, Hypertension, Sepsis
MMP8	5	Pneumonia, Lung Disease, Diabetes, Cancer, Sepsis
MRC1	5	Fever, Pneumonia, Cancer, Viral Entry, Viral Life Cycle
MUL1	5	Fever, Lung Disease, Diabetes, Cancer, Sepsis
MYH9	5	Kidney Disease, Diabetes, Hypertension, Cancer, Thrombocytopenia
NAMPT	5	Pneumonia, Kidney Disease, Diabetes, Cancer, Sepsis
NCAM1	5	Fever, Kidney Disease, Thrombocytopenia, Viral Entry, Viral Life Cycle

NOTCH1	5	Heart Disease, Kidney Disease, Hypertension, Cancer, Viral Life Cycle
NOX5	5	Heart Disease, Kidney Disease, Diabetes, Hypertension, Cancer
NPC1	5	Fever, Hypertension, Thrombocytopenia, Viral Entry, Viral Life Cycle
NPPA	5	Heart Disease, Kidney Disease, Diabetes, Hypertension, Acute Kidney Injury
POTEF	5	Fever, Heart Disease, Kidney Disease, Diabetes, Lymphopenia
PPARGC1A	5	Dyspnea, Heart Disease, Diabetes, Hypertension, Sepsis
PRKCD	5	Pneumonia, Lung Disease, Diabetes, Hypertension, Lymphopenia
PTEN	5	Fever, Lung Disease, Diabetes, Hypertension, Cancer
PTGS1	5	Fever, Pneumonia, Lung Disease, Diabetes, Hypertension
PWAR1	5	Fever, Pneumonia, Lung Disease, Sepsis, Thrombocytopenia
RBM45	5	Fever, Pneumonia, Kidney Disease, Diabetes, SARS-CoV
RMRP	5	Fever, Pneumonia, Hypertension, Cancer, Lymphopenia
ROS1	5	Pneumonia, Diabetes, Hypertension, Cancer, Sepsis
RUNX1	5	Fever, Lung Disease, Cancer, Leukocytosis, Thrombocytopenia
S100B	5	Fever, Pneumonia, Diabetes, Cancer, Sepsis
SELL	5	Pneumonia, Kidney Disease, Diabetes, Hypertension, Sepsis
SERPINA1	5	Dyspnea, Lung Disease, Diabetes, Hypertension, Acute Kidney Injury
SGK1	5	Heart Disease, Kidney Disease, Diabetes, Hypertension, Cancer
SLC2A1	5	Kidney Disease, Lung Disease, Diabetes, Hypertension, Cancer
SLC52A1	5	Pneumonia, Diabetes, Hypertension, Viral Entry, Viral Life Cycle
SMPD1	5	Fever, Dyspnea, Kidney Disease, Diabetes, Sepsis
SST	5	Diabetes, Hypertension, Cancer, Sepsis, Multiple Organ Failure
STAT1	5	Fever, Diabetes, Cancer, Lymphopenia, Thrombocytopenia
STAT5B	5	Dyspnea, Lung Disease, Diabetes, Cancer, Lymphopenia
STIM1	5	Fever, Lung Disease, Hypertension, Coagulopathy, Thrombocytopenia
TAC1	5	Cough, Fever, Diabetes, Cancer, Neutrophilia
TEK	5	Pneumonia, Hypertension, Cancer, Sepsis, Neutrophilia
TGFA	5	Fever, Pneumonia, Kidney Disease, Lung Disease, Hypertension
TLR9	5	Fever, Pneumonia, Kidney Disease, Diabetes, Sepsis
TMPRSS2	5	Fever, Cancer, SARS-CoV, Viral Entry, Viral Life Cycle
TXN	5	Pneumonia, Kidney Disease, Diabetes, Hypertension, Cancer
WAS	5	Fever, Dyspnea, Cancer, Lymphopenia, Thrombocytopenia
WNK1	5	Fever, Kidney Disease, Diabetes, Hypertension, Sepsis
XPR1	5	Pneumonia, Cancer, Thrombocytopenia, Viral Entry, Viral Life Cycle
ZC3H12A	5	Fever, Pneumonia, Heart Disease, Diabetes, Viral Life Cycle
ABCA3	4	Cough, Dyspnea, Pneumonia, Lung Disease
ABCG2	4	Fever, Diabetes, Cancer, Thrombocytopenia
ABCG5	4	Dyspnea, Diabetes, Hypertension, Coagulopathy
ABL1	4	Fever, Cancer, Leukocytosis, Thrombocytopenia
ADAR	4	Fever, Cancer, Sepsis, Viral Life Cycle

ADH1B	4	Fever, Diabetes, Hypertension, Lymphopenia
ADIPOQ	4	Kidney Disease, Lung Disease, Diabetes, Hypertension
ADORA2B	4	Pneumonia, Diabetes, Hypertension, Sepsis
ADRA1A	4	Kidney Disease, Lung Disease, Hypertension, Cancer
AFP	4	Fever, Kidney Disease, Diabetes, Cancer
AGTR1	4	Heart Disease, Kidney Disease, Diabetes, Hypertension
AHSA1	4	Fever, Pneumonia, Sepsis, SARS-CoV
AHSG	4	Kidney Disease, Diabetes, Acute Kidney Injury, SARS-CoV
AIMP2	4	Fever, Pneumonia, Sepsis, SARS-CoV
AKT2	4	Pneumonia, Diabetes, Hypertension, Cancer
ALOX12	4	Pneumonia, Diabetes, Hypertension, Sepsis
ALOX15	4	Pneumonia, Diabetes, Hypertension, Sepsis
ANXA1	4	Kidney Disease, Lung Disease, Hypertension, Cancer
ANXA5	4	Fever, Pneumonia, Heart Disease, Hypertension
AOC3	4	Pneumonia, Kidney Disease, Diabetes, Hypertension
APCS	4	Fever, Diabetes, Viral Entry, Viral Life Cycle
APEX1	4	Heart Disease, Lung Disease, Hypertension, Cancer
APOC3	4	Heart Disease, Kidney Disease, Diabetes, Hypertension
APOH	4	Fever, Diabetes, Hypertension, Thrombocytopenia
APOL1	4	Fever, Kidney Disease, Diabetes, Hypertension
AQP1	4	Kidney Disease, Hypertension, Cancer, Sepsis
AR	4	Heart Disease, Diabetes, Hypertension, Cancer
ATF3	4	Pneumonia, Diabetes, Hypertension, Sepsis
ATG7	4	Pneumonia, Hypertension, Cancer, Lymphopenia
ATP6AP2	4	Fever, Kidney Disease, Diabetes, Hypertension
AVP	4	Diabetes, Hypertension, Sepsis, Acute Kidney Injury
AXL	4	Fever, Cancer, Viral Entry, Viral Life Cycle
BCR	4	Diabetes, Cancer, Leukocytosis, Thrombocytopenia
BDNF	4	Pneumonia, Diabetes, Hypertension, Cancer
BRAF	4	Heart Disease, Cancer, Lymphopenia, Coagulopathy
BRCA2	4	Pneumonia, Diabetes, Cancer, Thrombocytopenia
BSG	4	Fever, Heart Disease, Hypertension, Cancer
CALCA	4	Diabetes, Hypertension, Sepsis, Neutrophilia
CASP1	4	Fever, Pneumonia, Kidney Disease, Sepsis
CBS	4	Heart Disease, Diabetes, Hypertension, Sepsis
CCL28	4	Kidney Disease, Hypertension, Cancer, Lymphopenia
CCND1	4	Kidney Disease, Hypertension, Cancer, Acute Kidney Injury
CD14	4	Fever, Pneumonia, Sepsis, Multiple Organ Failure
CD19	4	Fever, Pneumonia, Cancer, Lymphopenia
CD27	4	Fever, Diabetes, Cancer, Lymphopenia
CD28	4	Fever, Cancer, Lymphopenia, Viral Life Cycle
CD34	4	Fever, Diabetes, Leukocytosis, Thrombocytopenia
CD40	4	Pneumonia, Diabetes, Cancer, Sepsis
CDC42	4	Pneumonia, Kidney Disease, Cancer, Viral Life Cycle

CDK9	4	Fever, Lung Disease, Cancer, Sepsis
CDKN1C	4	Kidney Disease, Diabetes, Cancer, Thrombocytopenia
CDKN2B	4	Diabetes, Hypertension, Cancer, Thrombocytopenia
CDSN	4	Fever, Hypertension, Thrombocytopenia, SARS-CoV
CETP	4	Kidney Disease, Diabetes, Hypertension, Sepsis
CHD7	4	Pneumonia, Heart Disease, Cancer, Lymphopenia
CHDH	4	Heart Disease, Diabetes, Hypertension, Cancer
CHI3L1	4	Lung Disease, Hypertension, Cancer, Sepsis
CISD2	4	Kidney Disease, Diabetes, Cancer, Coagulopathy
CLDN1	4	Fever, Cancer, Viral Entry, Viral Life Cycle
COX1	4	Fever, Pneumonia, Lung Disease, Hypertension
CP	4	Heart Disease, Diabetes, Acute Kidney Injury, Thrombocytopenia
CRK	4	Fever, Pneumonia, Sepsis, SARS-CoV
CTF1	4	Heart Disease, Kidney Disease, Diabetes, Hypertension
CTSD	4	Kidney Disease, Lung Disease, Cancer, Lymphopenia
CTSL	4	Fever, Kidney Disease, Diabetes, SARS-CoV
CX3CL1	4	Fever, Pneumonia, Lung Disease, Hypertension
CX3CR1	4	Kidney Disease, Diabetes, Hypertension, Sepsis
CXCL1	4	Fever, Pneumonia, Lung Disease, SARS-CoV
CXCL9	4	Fever, Pneumonia, Diabetes, Hypertension
CYBA	4	Heart Disease, Kidney Disease, Diabetes, Hypertension
CYP2B6	4	Fever, Kidney Disease, Diabetes, Hypertension
CYP2E1	4	Pneumonia, Heart Disease, Kidney Disease, Diabetes
CYR61	4	Heart Disease, Diabetes, Hypertension, Sepsis
DDR1	4	Fever, Lung Disease, Hypertension, Cancer
DMD	4	Fever, Heart Disease, Diabetes, Hypertension
DNAH8	4	Heart Disease, Diabetes, Hypertension, Sepsis
DUSP1	4	Fever, Pneumonia, Hypertension, Sepsis
DYM	4	Lung Disease, Diabetes, Hypertension, Sepsis
EDNRB	4	Kidney Disease, Lung Disease, Hypertension, Lymphopenia
ELN	4	Pneumonia, Lung Disease, Hypertension, Thrombocytopenia
ENG	4	Dyspnea, Kidney Disease, Lung Disease, Hypertension
ERVK-19	4	Fever, Heart Disease, Sepsis, SARS-CoV
F11	4	Pneumonia, Hypertension, Sepsis, Coagulopathy
F11R	4	Diabetes, Hypertension, Viral Entry, Viral Life Cycle
F2	4	Lung Disease, Diabetes, Hypertension, Sepsis
F8	4	Cancer, Sepsis, Coagulopathy, Thrombocytopenia
FASN	4	Fever, Diabetes, Cancer, Sepsis
FCGR1A	4	Pneumonia, Lung Disease, Cancer, Sepsis
FCGR2A	4	Pneumonia, Kidney Disease, Sepsis, Thrombocytopenia
FCGR3B	4	Fever, Pneumonia, Cancer, Sepsis
FCN1	4	Lung Disease, Sepsis, Viral Entry, Viral Life Cycle
FGA	4	Kidney Disease, Hypertension, Coagulopathy, Thrombocytopenia
FGFR1	4	Fever, Dyspnea, Cancer, Thrombocytopenia

FOXF1	4	Dyspnea, Pneumonia, Lung Disease, Hypertension
FXN	4	Pneumonia, Heart Disease, Diabetes, Hypertension
G6PC	4	Kidney Disease, Diabetes, Hypertension, Coagulopathy
GAPDH	4	Heart Disease, Diabetes, Sepsis, SARS-CoV
GAS6	4	Acute Kidney Injury, Thrombocytopenia, Viral Entry, Viral Life Cycle
GATA3	4	Pneumonia, Kidney Disease, Diabetes, Cancer
GC	4	Lung Disease, Diabetes, Cancer, Acute Kidney Injury
GCG	4	Fever, Heart Disease, Diabetes, Hypertension
GJA1	4	Fever, Heart Disease, Kidney Disease, Hypertension
GLA	4	Heart Disease, Kidney Disease, Lung Disease, Hypertension
GLP1R	4	Fever, Diabetes, Hypertension, Cancer
GP1BA	4	Fever, Hypertension, Coagulopathy, Thrombocytopenia
GPR42	4	Kidney Disease, Lung Disease, Hypertension, Cancer
GRAP2	4	Fever, Pneumonia, Sepsis, SARS-CoV
GSK3B	4	Fever, Diabetes, Hypertension, Acute Kidney Injury
GSTK1	4	Fever, Heart Disease, Hypertension, Lymphopenia
GYPA	4	Diabetes, Hypertension, Viral Entry, Viral Life Cycle
GZMB	4	Fever, Pneumonia, Kidney Disease, Sepsis
HDAC9	4	Fever, Hypertension, Cancer, Thrombocytopenia
HMGA2	4	Kidney Disease, Diabetes, Cancer, Viral Life Cycle
HNF1A	4	Kidney Disease, Diabetes, Hypertension, Cancer
HNF4A	4	Heart Disease, Kidney Disease, Diabetes, Hypertension
HSD11B2	4	Kidney Disease, Diabetes, Hypertension, Cancer
HSPA14	4	Fever, Pneumonia, Diabetes, Sepsis
HSPA5	4	Fever, Pneumonia, Diabetes, Cancer
HSPB3	4	Fever, Diabetes, Cancer, Sepsis
ICOS	4	Fever, Pneumonia, Cancer, Lymphopenia
IDE	4	Diabetes, Hypertension, Viral Entry, Viral Life Cycle
IFIH1	4	Fever, Diabetes, Hypertension, Cancer
IFITM3	4	Fever, Cancer, Viral Entry, Viral Life Cycle
IGF1R	4	Lung Disease, Diabetes, Hypertension, Cancer
IGF2	4	Diabetes, Hypertension, Cancer, Lymphopenia
IL11	4	Fever, Diabetes, Cancer, Thrombocytopenia
IL12B	4	Fever, Lung Disease, Diabetes, Hypertension
IL23A	4	Fever, Pneumonia, Diabetes, Sepsis
IL4R	4	Cough, Dyspnea, Hypertension, Cancer
INSR	4	Kidney Disease, Lung Disease, Diabetes, Hypertension
IRF1	4	Fever, Heart Disease, Lung Disease, Hypertension
IRF5	4	Fever, Dyspnea, Pulmonary infiltrate, Kidney Disease
IRF7	4	Fever, Pneumonia, Cancer, Thrombocytopenia
IRS1	4	Diabetes, Hypertension, Cancer, Viral Life Cycle
ISYNA1	4	Fever, Diabetes, Hypertension, Sepsis
ITCH	4	Pneumonia, Cancer, Viral Entry, Viral Life Cycle
ITGAV	4	Pneumonia, Hypertension, Viral Entry, Viral Life Cycle

JAK1	4	Fever, Diabetes, Cancer, Thrombocytopenia
KDR	4	Kidney Disease, Diabetes, Hypertension, Cancer
KL	4	Kidney Disease, Diabetes, Hypertension, Cancer
KLF2	4	Pneumonia, Lung Disease, Diabetes, Sepsis
KLK1	4	Kidney Disease, Diabetes, Hypertension, Acute Kidney Injury
LEPR	4	Fever, Kidney Disease, Diabetes, Hypertension
LIPC	4	Kidney Disease, Diabetes, Hypertension, Cancer
LPL	4	Heart Disease, Kidney Disease, Diabetes, Hypertension
MARS	4	Cough, Dyspnea, Lung Disease, Cancer
MASP2	4	Fever, Pneumonia, Sepsis, SARS-CoV
MBD2	4	Fever, Lung Disease, Hypertension, Cancer
MCL1	4	Fever, Pneumonia, Cancer, Sepsis
MEFV	4	Pneumonia, Lung Disease, Sepsis, Leukocytosis
MERTK	4	Fever, Cancer, Lymphopenia, SARS-CoV
MIP	4	Fever, Pneumonia, Diabetes, SARS-CoV
MIR130A	4	Fever, Diabetes, Hypertension, Cancer
MIR150	4	Kidney Disease, Diabetes, Cancer, Sepsis
MIR155	4	Fever, Diabetes, Cancer, Sepsis
MIR195	4	Heart Disease, Diabetes, Hypertension, Cancer
MIR223	4	Fever, Diabetes, Cancer, Sepsis
MIR29B1	4	Fever, Diabetes, Hypertension, Cancer
MIR29B2	4	Fever, Diabetes, Hypertension, Cancer
MME	4	Cough, Fever, Hypertension, Thrombocytopenia
MYC	4	Fever, Heart Disease, Diabetes, Cancer
MYDGF	4	Pneumonia, Diabetes, Cancer, Sepsis
NAT2	4	Fever, Lung Disease, Diabetes, Hypertension
NBN	4	Fever, Cancer, Lymphopenia, Thrombocytopenia
NCF1	4	Kidney Disease, Diabetes, Hypertension, Sepsis
NFKBIA	4	Fever, Pneumonia, Lung Disease, Hypertension
NOD2	4	Fever, Pneumonia, Diabetes, Sepsis
NPPB	4	Dyspnea, Heart Disease, Kidney Disease, Hypertension
NR0B2	4	Fever, Pneumonia, Heart Disease, Diabetes
NR3C2	4	Heart Disease, Kidney Disease, Diabetes, Hypertension
NRAS	4	Cancer, Leukocytosis, Coagulopathy, Thrombocytopenia
NRP1	4	Pneumonia, Kidney Disease, Cancer, Sepsis
OGG1	4	Heart Disease, Diabetes, Hypertension, Cancer
P2RX7	4	Lung Disease, Diabetes, Hypertension, Sepsis
P4HB	4	Fever, Diabetes, Viral Entry, Viral Life Cycle
PAEP	4	Fever, Diabetes, Hypertension, Thrombocytopenia
PARP9	4	Cough, Pneumonia, Lung Disease, Neutrophilia
PDCD1	4	Fever, Pneumonia, Cancer, Sepsis
PDGFRA	4	Pulmonary infiltrate, Lung Disease, Hypertension, Thrombocytopenia
PGF	4	Pneumonia, Diabetes, Hypertension, Cancer
PIK3R1	4	Cough, Diabetes, Hypertension, Cancer

PLA2G6	4	Kidney Disease, Lung Disease, Diabetes, Sepsis
PLAT	4	Fever, Pneumonia, Hypertension, Sepsis
POLDIP2	4	Fever, Pneumonia, Sepsis, SARS-CoV
PRF1	4	Fever, Diabetes, Lymphopenia, Thrombocytopenia
PRH1	4	Fever, Heart Disease, Hypertension, Sepsis
PRH2	4	Fever, Heart Disease, Hypertension, Sepsis
PTH	4	Kidney Disease, Diabetes, Hypertension, Cancer
PTK2B	4	Kidney Disease, Diabetes, Hypertension, Sepsis
RAC2	4	Heart Disease, Hypertension, Leukocytosis, Lymphopenia
RAF1	4	Fever, Diabetes, Cancer, Coagulopathy
RAG2	4	Fever, Pneumonia, Diabetes, Thrombocytopenia
RELA	4	Fever, Diabetes, Hypertension, Sepsis
RENBP	4	Kidney Disease, Lung Disease, Diabetes, Hypertension
RNASE3	4	Fever, Pneumonia, Diabetes, Cancer
RNF19A	4	Fever, Pneumonia, Sepsis, SARS-CoV
RNU1-4	4	Kidney Disease, Diabetes, Hypertension, Cancer
S100A8	4	Fever, Diabetes, Cancer, Sepsis
S100A9	4	Fever, Pneumonia, Cancer, Sepsis
SALL4	4	Fever, Cancer, Leukocytosis, Thrombocytopenia
SARS	4	Fever, Pneumonia, Lung Disease, SARS-CoV
SCARB1	4	Heart Disease, Diabetes, Viral Entry, Viral Life Cycle
SCGB1A1	4	Pneumonia, Kidney Disease, Lung Disease, Hypertension
SERPINB3	4	Fever, Cancer, Viral Entry, Viral Life Cycle
SERPINF1	4	Heart Disease, Kidney Disease, Diabetes, Sepsis
SETD2	4	Heart Disease, Kidney Disease, Hypertension, Cancer
SFTPD	4	Fever, Pneumonia, Lung Disease, Sepsis
SIRT3	4	Kidney Disease, Hypertension, Cancer, Sepsis
SLC17A5	4	Fever, Diabetes, Hypertension, Thrombocytopenia
SLC20A2	4	Sepsis, Thrombocytopenia, Viral Entry, Viral Life Cycle
SLC27A5	4	Cough, Pneumonia, Lung Disease, Neutrophilia
SLC2A2	4	Fever, Kidney Disease, Diabetes, Hypertension
SLCO6A1	4	Fever, Heart Disease, Hypertension, Lymphopenia
SMARCAL1	4	Kidney Disease, Hypertension, Lymphopenia, Thrombocytopenia
SOS1	4	Diabetes, Hypertension, Cancer, Coagulopathy
SQSTM1	4	Fever, Dyspnea, Hypertension, Cancer
SSTR4	4	Kidney Disease, Lung Disease, Hypertension, Cancer
STAT5A	4	Diabetes, Hypertension, Cancer, Lymphopenia
TAGLN	4	Pneumonia, Kidney Disease, Diabetes, Hypertension
TALDO1	4	Fever, Kidney Disease, Diabetes, Thrombocytopenia
TCF7L2	4	Kidney Disease, Diabetes, Hypertension, Cancer
TERC	4	Cough, Lung Disease, Lymphopenia, Thrombocytopenia
TGFBI	4	Kidney Disease, Diabetes, Cancer, Sepsis
TGM2	4	Fever, Diabetes, Hypertension, Cancer
TH	4	Fever, Heart Disease, Diabetes, Hypertension



THPO	4	Hypertension, Sepsis, Coagulopathy, Thrombocytopenia
TLR5	4	Pneumonia, Lung Disease, Diabetes, Sepsis
TLR8	4	Fever, Kidney Disease, Hypertension, Sepsis
TM7SF2	4	Kidney Disease, Diabetes, Hypertension, Sepsis
TMSB4X	4	Fever, Heart Disease, Kidney Disease, Sepsis
TNFRSF13B	4	Pneumonia, Cancer, Sepsis, Lymphopenia
TNFRSF13C	4	Pneumonia, Cancer, Sepsis, Lymphopenia
TNFRSF1B	4	Pneumonia, Diabetes, Hypertension, Lymphopenia
TNFSF10	4	Fever, Pneumonia, Diabetes, Cancer
TNFSF11	4	Diabetes, Hypertension, Cancer, Thrombocytopenia
TRPC6	4	Kidney Disease, Lung Disease, Diabetes, Hypertension
TSLP	4	Fever, Pneumonia, Lung Disease, Hypertension
TTR	4	Heart Disease, Kidney Disease, Hypertension, Acute Kidney Injury
TYRO3	4	Fever, Cancer, Viral Entry, Viral Life Cycle
UGT1A1	4	Cancer, Sepsis, Acute Kidney Injury, Thrombocytopenia
VAMP8	4	Heart Disease, Kidney Disease, Viral Entry, Viral Life Cycle
VHL	4	Fever, Kidney Disease, Hypertension, Cancer
VIP	4	Fever, Pneumonia, Hypertension, Cancer
VPS51	4	Heart Disease, Kidney Disease, Diabetes, Hypertension
VTN	4	Fever, Hypertension, Thrombocytopenia, SARS-CoV
WIPF1	4	Dyspnea, Cancer, Lymphopenia, Thrombocytopenia
WT1	4	Kidney Disease, Lung Disease, Hypertension, Cancer
XRCC1	4	Fever, Hypertension, Cancer, Thrombocytopenia
YWHAZ	4	Diabetes, Hypertension, Cancer, Sepsis
YY1	4	Lung Disease, Diabetes, Hypertension, Cancer
ZFP36	4	Fever, Kidney Disease, Diabetes, Cancer
A2M	3	Lung Disease, Diabetes, Acute Kidney Injury
ABCB6	3	Diabetes, Hypertension, Cancer
ABCC2	3	Fever, Heart Disease, Hypertension
ADAM10	3	Kidney Disease, Diabetes, Sepsis
ADD1	3	Kidney Disease, Diabetes, Hypertension
ADORA1	3	Lung Disease, Diabetes, Hypertension
ADRA2A	3	Heart Disease, Diabetes, Hypertension
ADRB3	3	Lung Disease, Diabetes, Hypertension
AICDA	3	Fever, Thrombocytopenia, Viral Life Cycle
ALDH7A1	3	Dyspnea, Pneumonia, Hypertension
AOC2	3	Pneumonia, Diabetes, Hypertension
APLNR	3	Heart Disease, Diabetes, Hypertension
APOA4	3	Kidney Disease, Diabetes, Hypertension
APOA5	3	Heart Disease, Diabetes, Hypertension
APOC1	3	Heart Disease, Hypertension, Sepsis
AQP2	3	Kidney Disease, Diabetes, Hypertension
ARHGEF7	3	Pneumonia, Cancer, Sepsis
ARNTL	3	Kidney Disease, Diabetes, Hypertension

ATF2	3	Fever, Hypertension, Cancer
ATG16L1	3	Fever, Sepsis, Viral Life Cycle
ATP2A2	3	Heart Disease, Diabetes, Hypertension
ATP5PF	3	Heart Disease, Diabetes, Hypertension
BANF1	3	Fever, Cancer, Viral Life Cycle
BCL10	3	Pulmonary infiltrate, Diabetes, Thrombocytopenia
BDKRB1	3	Kidney Disease, Diabetes, Hypertension
BECN1	3	Fever, Lung Disease, Hypertension
BLNK	3	Cough, Pneumonia, Sepsis
BMPR2	3	Dyspnea, Heart Disease, Hypertension
BRD2	3	Fever, Cancer, SARS-CoV
BTK	3	Pneumonia, Cancer, Lymphopenia
BTNL2	3	Cough, Dyspnea, Thrombocytopenia
C3AR1	3	Pneumonia, Lung Disease, Sepsis
CABIN1	3	Kidney Disease, Diabetes, Hypertension
CAD	3	Kidney Disease, Diabetes, Hypertension
CALR	3	Hypertension, Lymphopenia, SARS-CoV
CARS	3	Kidney Disease, Diabetes, Sepsis
CASP8	3	Fever, Pneumonia, Diabetes
CCL20	3	Pneumonia, Diabetes, Cancer
CCL22	3	Pneumonia, Hypertension, Lymphopenia
CCR3	3	Fever, Pneumonia, Lung Disease
CCR6	3	Dyspnea, Pneumonia, Pulmonary infiltrate
CD2AP	3	Kidney Disease, Diabetes, Hypertension
CD38	3	Kidney Disease, Diabetes, Cancer
CD4	3	Fever, Viral Entry, Viral Life Cycle
CD46	3	Fever, Viral Entry, Viral Life Cycle
CD55	3	Fever, Viral Entry, Viral Life Cycle
CD59	3	Fever, Diabetes, Hypertension
CD68	3	Fever, Pneumonia, Diabetes
CD74	3	Fever, Viral Entry, Viral Life Cycle
CDK1	3	Cancer, Viral Entry, Viral Life Cycle
CDK2	3	Fever, Diabetes, Cancer
CDKAL1	3	Kidney Disease, Diabetes, Hypertension
CDKN1B	3	Fever, Diabetes, Cancer
CEACAM5	3	Fever, Lung Disease, Cancer
CEBPB	3	Fever, Kidney Disease, Diabetes
CFB	3	Pneumonia, Diabetes, Sepsis
CFC1	3	Heart Disease, Kidney Disease, Cancer
CHEK2	3	Kidney Disease, Hypertension, Cancer
CISH	3	Fever, Diabetes, Cancer
CLEC4M	3	SARS-CoV, Viral Entry, Viral Life Cycle
CMA1	3	Heart Disease, Kidney Disease, Hypertension
COL4A1	3	Kidney Disease, Hypertension, Cancer

COL4A5	3	Kidney Disease, Hypertension, Thrombocytopenia
CORO1A	3	Fever, Cancer, Lymphopenia
CR1	3	SARS-CoV, Viral Entry, Viral Life Cycle
CREB1	3	Fever, Lung Disease, Cancer
CRLF2	3	Pneumonia, Cancer, Thrombocytopenia
CRYZ	3	Diabetes, Hypertension, Cancer
CTNNA1	3	Fever, Diabetes, Cancer
CTSC	3	Lung Disease, Diabetes, Hypertension
CXCR1	3	Lung Disease, Diabetes, Hypertension
CYP24A1	3	Kidney Disease, Diabetes, Cancer
CYP2A6	3	Kidney Disease, Hypertension, Cancer
CYP2C19	3	Diabetes, Hypertension, Acute Kidney Injury
CYP2C8	3	Kidney Disease, Hypertension, Sepsis
CYP2D6	3	Fever, Hypertension, Acute Kidney Injury
CYP2J2	3	Diabetes, Hypertension, Cancer
CYP3A5	3	Kidney Disease, Hypertension, Cancer
DAG1	3	Hypertension, Viral Entry, Viral Life Cycle
DBP	3	Diabetes, Hypertension, Viral Life Cycle
DCN	3	Kidney Disease, Diabetes, Hypertension
DDAH2	3	Kidney Disease, Hypertension, Sepsis
DHFR	3	Fever, Pneumonia, Thrombocytopenia
DHPS	3	Pneumonia, Lung Disease, Diabetes
DKK3	3	Fever, Kidney Disease, Cancer
DLD	3	Diabetes, Hypertension, Sepsis
DNMT3B	3	Fever, Pneumonia, Lymphopenia
DUOX1	3	Diabetes, Hypertension, Thrombocytopenia
DUOX2	3	Diabetes, Hypertension, Thrombocytopenia
EDA	3	Dyspnea, Kidney Disease, Sepsis
EEF1A2	3	Heart Disease, Lung Disease, Diabetes
EFNB2	3	Kidney Disease, Viral Entry, Viral Life Cycle
EIF2AK2	3	Fever, Cancer, Viral Life Cycle
EIF2AK3	3	Fever, Kidney Disease, Diabetes
ENO1	3	Kidney Disease, Hypertension, Cancer
ENPP1	3	Kidney Disease, Diabetes, Hypertension
ENTPD1	3	Pneumonia, Heart Disease, Diabetes
EPHA2	3	Cancer, Viral Entry, Viral Life Cycle
EPHB2	3	Fever, Heart Disease, Cancer
EPHX2	3	Diabetes, Hypertension, Acute Kidney Injury
ERCC1	3	Kidney Disease, Cancer, Thrombocytopenia
ERCC4	3	Kidney Disease, Hypertension, Thrombocytopenia
ERVK-11	3	Fever, Sepsis, SARS-CoV
ERVK-18	3	Fever, Heart Disease, Diabetes
ESR2	3	Fever, Hypertension, Cancer
ETS1	3	Diabetes, Cancer, Thrombocytopenia

EZR	3	Kidney Disease, Lung Disease, Diabetes
FABP2	3	Kidney Disease, Diabetes, Hypertension
FAH	3	Fever, Hypertension, Coagulopathy
FANCC	3	Diabetes, Cancer, Thrombocytopenia
FAT1	3	Kidney Disease, Diabetes, Cancer
FBN1	3	Heart Disease, Hypertension, Thrombocytopenia
FCGR2B	3	Fever, Pneumonia, Kidney Disease
FCGRT	3	Kidney Disease, Diabetes, Thrombocytopenia
FGF1	3	Heart Disease, Hypertension, Cancer
FGF13	3	Fever, Kidney Disease, Diabetes
FGFR4	3	Diabetes, Hypertension, Cancer
FGG	3	Pneumonia, Kidney Disease, Coagulopathy
FKBP5	3	Fever, Diabetes, Cancer
FLI1	3	Kidney Disease, Cancer, Thrombocytopenia
FLT3	3	Diabetes, Cancer, Leukocytosis
FMR1	3	Hypertension, Cancer, Viral Life Cycle
FOXC1	3	Fever, Kidney Disease, Cancer
FOXD3	3	Kidney Disease, Diabetes, Sepsis
FOXO1	3	Fever, Diabetes, Hypertension
FOXO3	3	Fever, Pneumonia, Cancer
FRMD3	3	Kidney Disease, Diabetes, Hypertension
FTO	3	Diabetes, Hypertension, Cancer
G6PC3	3	Sepsis, Lymphopenia, Thrombocytopenia
GAD1	3	Kidney Disease, Diabetes, Cancer
GAL	3	Diabetes, Hypertension, Sepsis
GAST	3	Heart Disease, Diabetes, Sepsis
GATA2	3	Fever, Lymphopenia, Thrombocytopenia
GATA4	3	Heart Disease, Diabetes, Hypertension
GBA	3	Cough, Dyspnea, Thrombocytopenia
GCK	3	Kidney Disease, Diabetes, Hypertension
GCKR	3	Kidney Disease, Diabetes, Cancer
GCLC	3	Pneumonia, Lung Disease, Hypertension
GDF15	3	Fever, Pneumonia, Diabetes
GFER	3	Lung Disease, Diabetes, Acute Kidney Injury
GHRL	3	Heart Disease, Diabetes, Hypertension
GNB3	3	Kidney Disease, Diabetes, Hypertension
GORASP1	3	Fever, Diabetes, Sepsis
GP6	3	Kidney Disease, Diabetes, Thrombocytopenia
GPX1	3	Lung Disease, Diabetes, Hypertension
GREM1	3	Lung Disease, Diabetes, Cancer
GRK5	3	Heart Disease, Hypertension, Sepsis
GSTA1	3	Diabetes, Hypertension, Acute Kidney Injury
HBB	3	Dyspnea, Sepsis, Leukocytosis

HBG2	3	Diabetes, Hypertension, Acute Kidney Injury
HDAC1	3	Fever, Heart Disease, Cancer
HLA-C	3	Fever, Diabetes, Lymphopenia
HLA-DPA1	3	Fever, Kidney Disease, Thrombocytopenia
HMGA1	3	Diabetes, Cancer, Sepsis
HNF1B	3	Kidney Disease, Diabetes, Cancer
HPSE	3	Diabetes, Sepsis, Thrombocytopenia
HSPB1	3	Fever, Diabetes, Cancer
HSPB2	3	Fever, Diabetes, Cancer
HSPG2	3	Kidney Disease, Hypertension, Cancer
ID1	3	Kidney Disease, Hypertension, Cancer
IFI27	3	Kidney Disease, Sepsis, Viral Life Cycle
IFITM1	3	Fever, Viral Entry, Viral Life Cycle
IFN1@	3	Fever, Sepsis, SARS-CoV
IGF2R	3	Fever, Lung Disease, Diabetes
IGFBP3	3	Kidney Disease, Diabetes, Hypertension
IGH	3	Pulmonary infiltrate, Diabetes, Cancer
IL16	3	Pneumonia, Lung Disease, Hypertension
IL17D	3	Pneumonia, Diabetes, Sepsis
IL17F	3	Lung Disease, Diabetes, Neutrophilia
IL1R1	3	Pneumonia, Diabetes, Neutrophilia
IL25	3	Pneumonia, Diabetes, Cancer
IL27	3	Pneumonia, Diabetes, Sepsis
IL32	3	Fever, Lung Disease, Cancer
IL5	3	Pneumonia, Lung Disease, Neutrophilia
IL7R	3	Fever, Pneumonia, Lymphopenia
IL9	3	Pneumonia, Lung Disease, Cancer
ILK	3	Fever, Heart Disease, Kidney Disease
IRAK1	3	Diabetes, Hypertension, Sepsis
IRF3	3	Fever, Pneumonia, SARS-CoV
IRS2	3	Kidney Disease, Diabetes, Hypertension
ITGA3	3	Lung Disease, Cancer, Sepsis
ITGA5	3	Pneumonia, Viral Entry, Viral Life Cycle
ITGAE	3	Fever, Pneumonia, Lung Disease
ITGAX	3	Fever, Pneumonia, Diabetes
ITGB7	3	Diabetes, Viral Entry, Viral Life Cycle
ITK	3	Fever, Cancer, Thrombocytopenia
JAK3	3	Pneumonia, Cancer, Lymphopenia
KAT2B	3	Kidney Disease, Diabetes, Cancer
KEAP1	3	Kidney Disease, Lung Disease, Sepsis
KIR2DL2	3	Fever, Heart Disease, Diabetes
KIR2DS2	3	Fever, Heart Disease, Diabetes
KLF6	3	Fever, Diabetes, Hypertension
KLK3	3	Fever, Lung Disease, Cancer

KLRC4-KLRK1	3	Fever, Kidney Disease, Diabetes
KLRK1	3	Fever, Kidney Disease, Diabetes
KMT2D	3	Kidney Disease, Diabetes, Cancer
LAMP1	3	Sepsis, Viral Entry, Viral Life Cycle
LCK	3	Heart Disease, Lung Disease, Diabetes
LETM1	3	Kidney Disease, Diabetes, Cancer
LINC01194	3	Fever, Diabetes, Cancer
LMNA	3	Heart Disease, Diabetes, Hypertension
LRP2	3	Kidney Disease, Hypertension, Acute Kidney Injury
LTA	3	Lung Disease, Diabetes, Sepsis
LTF	3	Hypertension, Cancer, Viral Life Cycle
LYZ	3	Kidney Disease, Diabetes, Hypertension
MARK2	3	Fever, Lung Disease, Cancer
MBTPS1	3	Fever, Kidney Disease, Lymphopenia
MDM2	3	Fever, Diabetes, Cancer
MEF2A	3	Heart Disease, Diabetes, Hypertension
MET	3	Fever, Heart Disease, Cancer
MICA	3	Fever, Heart Disease, Diabetes
MIR132	3	Diabetes, Hypertension, Cancer
MIR143	3	Diabetes, Hypertension, Cancer
MIR15A	3	Diabetes, Cancer, Sepsis
MIR206	3	Heart Disease, Hypertension, Cancer
MIR22	3	Diabetes, Hypertension, Cancer
MIR338	3	Fever, Diabetes, Cancer
MIR34A	3	Heart Disease, Diabetes, Cancer
MIR499A	3	Heart Disease, Diabetes, Hypertension
MIR608	3	Hypertension, Cancer, Sepsis
MKKS	3	Kidney Disease, Diabetes, Hypertension
MMP7	3	Kidney Disease, Lung Disease, Hypertension
MMRN1	3	Lung Disease, Diabetes, Thrombocytopenia
MPV17	3	Fever, Kidney Disease, Hypertension
MPZ	3	Cough, Dyspnea, Sepsis
MSN	3	Fever, Sepsis, Lymphopenia
MTPP	3	Fever, Diabetes, Sepsis
MUC1	3	Kidney Disease, Hypertension, Cancer
MUC5AC	3	Fever, Pneumonia, Lung Disease
MX1	3	Fever, SARS-CoV, Viral Life Cycle
MYOM2	3	Fever, Heart Disease, SARS-CoV
NECTIN1	3	Fever, Viral Entry, Viral Life Cycle
NECTIN4	3	Fever, Viral Entry, Viral Life Cycle
NELFE	3	Fever, Diabetes, Sepsis
NF1	3	Heart Disease, Hypertension, Cancer
NFATC3	3	Fever, Diabetes, Hypertension
NGFR	3	Kidney Disease, Diabetes, Hypertension

NKX2-1	3	Dyspnea, Pneumonia, Lung Disease
NM	3	Fever, Pneumonia, Sepsis
NOD1	3	Fever, Diabetes, Sepsis
NOS1	3	Diabetes, Hypertension, Sepsis
NOTCH3	3	Heart Disease, Kidney Disease, Hypertension
NOV	3	Kidney Disease, Diabetes, Cancer
NOX1	3	Diabetes, Hypertension, Sepsis
NOX4	3	Diabetes, Hypertension, Cancer
NPHS2	3	Heart Disease, Kidney Disease, Diabetes
NPPC	3	Heart Disease, Kidney Disease, Hypertension
NR1H3	3	Hypertension, Cancer, Sepsis
NR1H4	3	Kidney Disease, Diabetes, Cancer
NR1I3	3	Fever, Cancer, Sepsis
NR4A3	3	Diabetes, Hypertension, Cancer
NT5E	3	Fever, Hypertension, Cancer
NTN1	3	Diabetes, Cancer, Sepsis
NUP153	3	Fever, Viral Entry, Viral Life Cycle
NUP62	3	Fever, Cancer, Viral Life Cycle
NUP98	3	Fever, Lymphopenia, Viral Life Cycle
OAS1	3	Fever, SARS-CoV, Viral Life Cycle
OCN	3	Cancer, Acute Kidney Injury, Thrombocytopenia
OGA	3	Kidney Disease, Diabetes, Hypertension
OSM	3	Pneumonia, Lung Disease, Cancer
PC	3	Diabetes, Sepsis, Viral Life Cycle
PCBP2	3	Fever, Cancer, Viral Life Cycle
PCSK5	3	Kidney Disease, Lung Disease, Viral Life Cycle
PCSK9	3	Dyspnea, Diabetes, Hypertension
PDE4A	3	Pneumonia, Lung Disease, Cancer
PDE5A	3	Heart Disease, Diabetes, Hypertension
PF4	3	Pneumonia, Heart Disease, Thrombocytopenia
PGR-AS1	3	Kidney Disease, Diabetes, Hypertension
PIN1	3	Pneumonia, Diabetes, Cancer
PINK1	3	Pneumonia, Diabetes, Cancer
PKD1	3	Kidney Disease, Diabetes, Hypertension
PKHD1	3	Fever, Kidney Disease, Hypertension
PKLR	3	Fever, Diabetes, Cancer
PLA2G2A	3	Kidney Disease, Lung Disease, Sepsis
PLA2G4A	3	Pneumonia, Cancer, Sepsis
PLAUR	3	Kidney Disease, Cancer, Sepsis
PLB1	3	Diabetes, Cancer, Sepsis
PLF	3	Cough, Lung Disease, Diabetes
PLN	3	Heart Disease, Diabetes, Hypertension
PNPLA2	3	Heart Disease, Diabetes, Sepsis
PPIG	3	Fever, Hypertension, Cancer

PRKAR1A	3	Fever, Hypertension, Cancer
PRKCA	3	Diabetes, Hypertension, Sepsis
PRKD1	3	Kidney Disease, Hypertension, Cancer
PROC	3	Hypertension, Sepsis, Multiple Organ Failure
PRSS8	3	Diabetes, Hypertension, Cancer
PRTN3	3	Cough, Pulmonary infiltrate, Lung Disease
PSMD9	3	Kidney Disease, Diabetes, Hypertension
PTGIS	3	Cough, Diabetes, Hypertension
PTHLH	3	Fever, Lung Disease, Diabetes
PTK2	3	Kidney Disease, Lung Disease, Hypertension
PTPN1	3	Lung Disease, Diabetes, Hypertension
PTPN11	3	Fever, Heart Disease, Coagulopathy
PTPN22	3	Cough, Pulmonary infiltrate, Diabetes
PTPRU	3	Diabetes, Hypertension, Cancer
PTTG1	3	Heart Disease, Diabetes, Cancer
PVR	3	Fever, Viral Entry, Viral Life Cycle
RAC1	3	Kidney Disease, Hypertension, Cancer
RAD51	3	Hypertension, Cancer, Thrombocytopenia
RALBP1	3	Diabetes, Hypertension, Cancer
RAPGEF5	3	Kidney Disease, Diabetes, Hypertension
REG1A	3	Diabetes, Hypertension, Cancer
RETNLB	3	Pneumonia, Lung Disease, Hypertension
RIMS2	3	Fever, Diabetes, Sepsis
RN7SL263P	3	Fever, Diabetes, Hypertension
RNASEL	3	Fever, Cancer, Viral Life Cycle
RPSA	3	Cancer, Viral Entry, Viral Life Cycle
RTEL1	3	Cough, Fever, Thrombocytopenia
RUNX2	3	Fever, Heart Disease, Cancer
RYR2	3	Heart Disease, Diabetes, Hypertension
S100A12	3	Pneumonia, Diabetes, Hypertension
SAMHD1	3	Fever, Cancer, Thrombocytopenia
SCNN1A	3	Kidney Disease, Lung Disease, Hypertension
SCNN1B	3	Kidney Disease, Lung Disease, Hypertension
SCNN1G	3	Kidney Disease, Lung Disease, Hypertension
SDHC	3	Diabetes, Hypertension, Cancer
SERPINA3	3	Lung Disease, Diabetes, Hypertension
SERPINB1	3	Fever, Lung Disease, Diabetes
SESN2	3	Pneumonia, Hypertension, Cancer
SF3B1	3	Heart Disease, Cancer, Thrombocytopenia
SFRP1	3	Kidney Disease, Cancer, Sepsis
SFTPA1	3	Cough, Pneumonia, Lung Disease
SFTPA2	3	Cough, Pneumonia, Lung Disease
SFTPB	3	Dyspnea, Pneumonia, Lung Disease
SHBG	3	Heart Disease, Diabetes, Hypertension



SHH	3	Lung Disease, Diabetes, Cancer
SIK1	3	Dyspnea, Diabetes, Hypertension
SIRT6	3	Cancer, Sepsis, Lymphopenia
SLAMF1	3	Fever, Viral Entry, Viral Life Cycle
SLC10A1	3	Fever, Viral Entry, Viral Life Cycle
SLC12A3	3	Kidney Disease, Diabetes, Hypertension
SLC12A9	3	Fever, Diabetes, Hypertension
SLC1A5	3	Cancer, Viral Entry, Viral Life Cycle
SLC22A8	3	Fever, Kidney Disease, Hypertension
SLC25A3	3	Diabetes, Hypertension, Cancer
SLC26A9	3	Lung Disease, Diabetes, Hypertension
SLC33A1	3	Kidney Disease, Diabetes, Hypertension
SLC35A1	3	Dyspnea, Pneumonia, Thrombocytopenia
SLC3A2	3	Heart Disease, Hypertension, Cancer
SLC5A4	3	Diabetes, Hypertension, Sepsis
SLC6A4	3	Dyspnea, Diabetes, Hypertension
SLC7A2	3	Diabetes, Cancer, Sepsis
SLC9A3	3	Lung Disease, Diabetes, Hypertension
SLC9A3R1	3	Lung Disease, Hypertension, Cancer
SLPI	3	Lung Disease, Hypertension, Viral Life Cycle
SMAD3	3	Fever, Kidney Disease, Hypertension
SOAT1	3	Kidney Disease, Diabetes, Cancer
SOCS1	3	Fever, Diabetes, Cancer
SRC	3	Hypertension, Cancer, Thrombocytopenia
SREBF1	3	Kidney Disease, Diabetes, Hypertension
SRPK1	3	Fever, Cancer, Viral Life Cycle
SRY	3	Diabetes, Hypertension, Cancer
STK11	3	Diabetes, Hypertension, Cancer
STRA6	3	Heart Disease, Lung Disease, Cancer
SYK	3	Fever, Pneumonia, Cancer
SYT1	3	Fever, Diabetes, Sepsis
TACR1	3	Cough, Fever, Hypertension
TAM	3	Fever, Heart Disease, Cancer
TBK1	3	Fever, Dyspnea, Cancer
TCN2	3	Acute Kidney Injury, Lymphopenia, Thrombocytopenia
TET2	3	Hypertension, Cancer, Thrombocytopenia
TFAM	3	Diabetes, Hypertension, Sepsis
TFPI	3	Pneumonia, Cancer, Sepsis
TGFBR2	3	Cough, Kidney Disease, Hypertension
TICAM1	3	Fever, Pneumonia, Sepsis
TINF2	3	Lung Disease, Lymphopenia, Thrombocytopenia
TIPARP	3	Diabetes, Hypertension, Cancer
TIRAP	3	Fever, Pneumonia, Sepsis
TLR1	3	Kidney Disease, Cancer, Sepsis

TMBIM4	3	Fever, Diabetes, Cancer
TNC	3	Heart Disease, Hypertension, Cancer
TNFRSF10A	3	Fever, Cancer, Thrombocytopenia
TNFRSF11B	3	Fever, Diabetes, Hypertension
TNFRSF12A	3	Kidney Disease, Cancer, Acute Kidney Injury
TNFRSF4	3	Fever, Viral Entry, Viral Life Cycle
TNFRSF6B	3	Pneumonia, Diabetes, Cancer
TNFSF13B	3	Fever, Cancer, Lymphopenia
TOP2A	3	Cancer, Sepsis, Viral Life Cycle
TPO	3	Diabetes, Thrombocytopenia, SARS-CoV
TRAF6	3	Fever, Cancer, Sepsis
TREM1	3	Pneumonia, Kidney Disease, Sepsis
TREX1	3	Fever, Kidney Disease, Thrombocytopenia
TRIM13	3	Fever, Cancer, Viral Life Cycle
TRIM25	3	Fever, Viral Entry, Viral Life Cycle
TRIM32	3	Kidney Disease, Hypertension, Viral Life Cycle
TRIM5	3	Fever, Viral Entry, Viral Life Cycle
TRIM69	3	Fever, Pneumonia, Sepsis
TRPA1	3	Cough, Pneumonia, Diabetes
TRPM7	3	Diabetes, Hypertension, Cancer
TRPV1	3	Cough, Diabetes, Cancer
TRPV5	3	Diabetes, Hypertension, Sepsis
TWIST1	3	Lung Disease, Hypertension, Cancer
TXNIP	3	Diabetes, Hypertension, Cancer
TYMS	3	Pneumonia, Cancer, Thrombocytopenia
TYROBP	3	Kidney Disease, Neutrophilia, Lymphopenia
TYRP1	3	Cough, Kidney Disease, Cancer
UCHL1	3	Kidney Disease, Diabetes, Cancer
UCN3	3	Pneumonia, Lung Disease, Diabetes
UCP2	3	Diabetes, Hypertension, Sepsis
UMOD	3	Kidney Disease, Diabetes, Hypertension
UTS2	3	Kidney Disease, Diabetes, Hypertension
VCAN	3	Kidney Disease, Lung Disease, Cancer
VCL	3	Dyspnea, Heart Disease, Hypertension
VCP	3	Dyspnea, Pneumonia, Viral Life Cycle
VIM	3	Pneumonia, Lung Disease, Cancer
VTCN1	3	Kidney Disease, Diabetes, Cancer
WFS1	3	Kidney Disease, Diabetes, Thrombocytopenia
XIAP	3	Diabetes, Cancer, Thrombocytopenia
XRCC6	3	Heart Disease, Lung Disease, Hypertension
1	2	Viral Entry, Viral Life Cycle
16	2	Viral Entry, Viral Life Cycle
20	2	Viral Entry, Viral Life Cycle
4	2	Viral Entry, Viral Life Cycle

7	2	Viral Entry, Viral Life Cycle
AAAS	2	Diabetes, Viral Life Cycle
ABCC11	2	Diabetes, Sepsis
ABCC6	2	Fever, Hypertension
ABCC8	2	Diabetes, Sepsis
ABCC9	2	Heart Disease, Hypertension
ABCG1	2	Lung Disease, Diabetes
ACACB	2	Kidney Disease, Diabetes
ACAT1	2	Hypertension, Sepsis
ACD	2	Lung Disease, Thrombocytopenia
ACKR1	2	Fever, Pneumonia
ACSS2	2	Heart Disease, Cancer
ACTA2	2	Kidney Disease, Hypertension
ACTN4	2	Kidney Disease, Hypertension
ACVRL1	2	Dyspnea, Hypertension
AD14	2	Cough, Pneumonia
ADAMTS13	2	Sepsis, Thrombocytopenia
ADCY5	2	Diabetes, Hypertension
ADCYAP1	2	Diabetes, Hypertension
ADIPOR1	2	Diabetes, Cancer
ADRA1B	2	Kidney Disease, Hypertension
ADRB1	2	Heart Disease, Hypertension
AGTR2	2	Hypertension, Sepsis
AIM2	2	Fever, Cancer
AIP	2	Fever, Hypertension
AKR1A1	2	Heart Disease, Diabetes
AKR1B10	2	Fever, Cancer
ALAD	2	Kidney Disease, Hypertension
ALKBH1	2	Diabetes, Cancer
ALMS1	2	Diabetes, Hypertension
AMPD1	2	Heart Disease, Sepsis
ANG	2	Dyspnea, Cancer
ANGPTL2	2	Fever, Diabetes
AP3B1	2	Lung Disease, Thrombocytopenia
APOBEC3A	2	Cancer, Viral Life Cycle
APOBEC3B	2	Cancer, Viral Life Cycle
APOBEC3G	2	Fever, Viral Life Cycle
APOL3	2	Kidney Disease, Diabetes
APP	2	Diabetes, Hypertension
AREG	2	Fever, Lung Disease
ARHGEF5	2	Fever, Pneumonia
ARID1B	2	Hypertension, Cancer
ARR3	2	Fever, Cancer
ARTN	2	Fever, Hypertension

AS3MT	2	Diabetes, Cancer
ASCC1	2	Pneumonia, Sepsis
ASPG	2	Hypertension, Thrombocytopenia
ASXL1	2	Cancer, Thrombocytopenia
ATF4	2	Kidney Disease, Cancer
ATG14	2	Fever, Cancer
ATG5	2	Lymphopenia, Viral Life Cycle
ATP12A	2	Cough, Pneumonia
ATP2A3	2	Diabetes, Hypertension
ATP2B1	2	Hypertension, Cancer
ATP4A	2	Cough, Pneumonia
ATP5F1B	2	Hypertension, Acute Kidney Injury
ATP6V0A1	2	Hypertension, Sepsis
ATP7A	2	Hypertension, Thrombocytopenia
ATRX	2	Dyspnea, Thrombocytopenia
ATXN7	2	Pneumonia, Sepsis
AVPR1A	2	Diabetes, Hypertension
B3GAT1	2	Hypertension, Lymphopenia
BACH2	2	Diabetes, Cancer
BAG3	2	Fever, SARS-CoV
BBS12	2	Kidney Disease, Hypertension
BCHE	2	Diabetes, Thrombocytopenia
BEST1	2	Diabetes, Hypertension
BGLAP	2	Diabetes, Hypertension
BGN	2	Kidney Disease, Hypertension
BICC1	2	Kidney Disease, Diabetes
BLK	2	Kidney Disease, Diabetes
BLVRA	2	Kidney Disease, Sepsis
BMP2	2	Hypertension, Cancer
BMP7	2	Kidney Disease, Diabetes
BMPR1A	2	Hypertension, Cancer
BNIP3L	2	Heart Disease, Diabetes
BPI	2	Lung Disease, Sepsis
BPIFA1	2	Lung Disease, Neutrophilia
BRD4	2	Kidney Disease, Cancer
BRIP1	2	Cancer, Thrombocytopenia
BST2	2	SARS-CoV, Viral Life Cycle
BTN2A1	2	Diabetes, Hypertension
BUD23	2	Pneumonia, Lung Disease
C1GALT1	2	Kidney Disease, Thrombocytopenia
C20orf181	2	Fever, Diabetes
C5	2	Fever, Sepsis
C9JQL5	2	Viral Entry, Viral Life Cycle
CA2	2	Kidney Disease, Thrombocytopenia

CACNA1C	2	Heart Disease, Hypertension
CALM1	2	Heart Disease, Hypertension
CALM2	2	Heart Disease, Hypertension
CALM3	2	Heart Disease, Hypertension
CAMP	2	Lung Disease, Sepsis
CAPN1	2	Hypertension, Cancer
CAPN10	2	Diabetes, Hypertension
CASP9	2	Heart Disease, Sepsis
CASQ2	2	Heart Disease, Hypertension
CAV2	2	Viral Entry, Viral Life Cycle
CAV3	2	Heart Disease, Diabetes
CCDC114	2	Cough, Lung Disease
CCL11	2	Pneumonia, Diabetes
CCL18	2	Pneumonia, Lung Disease
CCL3	2	Fever, Pneumonia
CCL4	2	Pneumonia, Sepsis
CCL8	2	Pneumonia, Viral Life Cycle
CCNA2	2	Heart Disease, Sepsis
CCNE1	2	Hypertension, Cancer
CCNF	2	Dyspnea, Cancer
CCR1	2	Pneumonia, Lung Disease
CD163	2	Diabetes, Sepsis
CD177	2	Sepsis, Neutrophilia
CD1D	2	Fever, Diabetes
CD24	2	Fever, Cancer
CD3D	2	Sepsis, Lymphopenia
CD53	2	Lymphopenia, Thrombocytopenia
CD70	2	Fever, Cancer
CD82	2	Hypertension, Cancer
CD9	2	Fever, Lung Disease
CDC45	2	Dyspnea, Cancer
CDH1	2	Fever, Cancer
CDH13	2	Kidney Disease, Hypertension
CDHR3	2	Viral Entry, Viral Life Cycle
CDK4	2	Diabetes, Cancer
CDKN2B-AS1	2	Diabetes, Cancer
CDKN3	2	Diabetes, Cancer
CDO1	2	Hypertension, Cancer
CDR3	2	Fever, Lymphopenia
CEACAM3	2	Lung Disease, Cancer
CEACAM7	2	Lung Disease, Cancer
CEMIP	2	Pneumonia, Cancer
CEP290	2	Kidney Disease, Hypertension
CFHR1	2	Pneumonia, Hypertension

CHAT	2	Dyspnea, Diabetes
CHEK1	2	Fever, Cancer
CHGA	2	Diabetes, Hypertension
CHIT1	2	Lung Disease, Sepsis
CHMP2B	2	Dyspnea, Viral Life Cycle
CHP1	2	Fever, Lung Disease
CHRM3	2	Heart Disease, Diabetes
CHST3	2	Diabetes, Hypertension
CHUK	2	Fever, Pneumonia
CLC	2	Kidney Disease, Hypertension
CLCNKB	2	Kidney Disease, Hypertension
CLDN16	2	Kidney Disease, Hypertension
CLDN6	2	Viral Entry, Viral Life Cycle
CLDN9	2	Viral Entry, Viral Life Cycle
CLEC4D	2	Lung Disease, Sepsis
CLEC4E	2	Kidney Disease, Lung Disease
CLEC4G	2	Viral Entry, Viral Life Cycle
CLEC5A	2	Viral Entry, Viral Life Cycle
CLEC7A	2	Pneumonia, Sepsis
CNDP1	2	Kidney Disease, Diabetes
CNR1	2	Diabetes, Hypertension
COL1A1	2	Diabetes, Hypertension
COL3A1	2	Lung Disease, Hypertension
COL4A3	2	Kidney Disease, Hypertension
COL4A4	2	Kidney Disease, Hypertension
COMT	2	Diabetes, Hypertension
CORIN	2	Heart Disease, Hypertension
CPE	2	Fever, Diabetes
CRH	2	Hypertension, Sepsis
CRHR2	2	Lung Disease, Hypertension
CRISPLD2	2	Lung Disease, Sepsis
CRY1	2	Diabetes, Hypertension
CSF3R	2	Leukocytosis, Thrombocytopenia
CSMD1	2	Hypertension, Cancer
CTBP2	2	Cancer, Viral Life Cycle
CTSG	2	Pneumonia, Lung Disease
CTSK	2	Pneumonia, Lung Disease
CTSS	2	Lung Disease, Cancer
CUX1	2	Diabetes, Cancer
CXADRP1	2	Fever, Cancer
CXCL11	2	Fever, Hypertension
CXCL13	2	Pneumonia, Hypertension
CYGB	2	Kidney Disease, Diabetes
CYLD	2	Pneumonia, Cancer

CYP11B1	2	Heart Disease, Hypertension
CYP11B2	2	Diabetes, Hypertension
CYP1A2	2	Hypertension, Sepsis
CYP1B1	2	Hypertension, Cancer
CYP3A4	2	Kidney Disease, Hypertension
CYP4F3	2	Fever, Hypertension
CYP7A1	2	Diabetes, Hypertension
CYTB	2	Pneumonia, Hypertension
DAO	2	Dyspnea, Kidney Disease
DAPK1	2	Diabetes, Cancer
DAPK3	2	Diabetes, Hypertension
DAXX	2	Fever, Lymphopenia
DBH	2	Kidney Disease, Hypertension
DCLRE1C	2	Pneumonia, Thrombocytopenia
DDAH1	2	Kidney Disease, Hypertension
DDIT3	2	Kidney Disease, Diabetes
DDOST	2	Fever, Kidney Disease
DDX3X	2	Fever, Viral Life Cycle
DDX5	2	Cancer, Viral Life Cycle
DDX53	2	Cancer, Thrombocytopenia
DDX6	2	Fever, Viral Life Cycle
DEFB1	2	Diabetes, Sepsis
DEFB4A	2	Pneumonia, Sepsis
DEFB4B	2	Pneumonia, Sepsis
DEK	2	Fever, Viral Life Cycle
DIANPH	2	Kidney Disease, Diabetes
DICER1	2	Fever, Cancer
DIO2	2	Diabetes, Hypertension
DNASE1	2	Lung Disease, Diabetes
DNASE1L3	2	Cough, Dyspnea
DNM2	2	Diabetes, Hypertension
DNMT1	2	Fever, Cancer
DPYD	2	Cancer, Thrombocytopenia
DRD2	2	Hypertension, Cancer
DRD3	2	Kidney Disease, Hypertension
DROSHA	2	Fever, Hypertension
DSP	2	Cough, Heart Disease
DVL3	2	Lung Disease, Cancer
DYNLT1	2	Viral Entry, Viral Life Cycle
E2F1	2	Cancer, Thrombocytopenia
ECE1	2	Pneumonia, Hypertension
EEA1	2	Diabetes, Viral Life Cycle
EFNB3	2	Viral Entry, Viral Life Cycle
EHMT1	2	Fever, Diabetes

EIF2S1	2	Fever, Diabetes
EIF2S2	2	Fever, Diabetes
EIF2S3	2	Fever, Diabetes
EIF4E	2	Fever, Cancer
ELMO1	2	Kidney Disease, Diabetes
EMD	2	Fever, Heart Disease
EMILIN2	2	Heart Disease, Hypertension
ENPEP	2	Fever, Hypertension
EOMES	2	Fever, Lymphopenia
EPAS1	2	Hypertension, Cancer
EPCAM	2	Cancer, Thrombocytopenia
EPG5	2	Fever, Pneumonia
EPHA3	2	Hypertension, Cancer
EPS15	2	Viral Entry, Viral Life Cycle
ERAP1	2	Fever, Hypertension
ERAP2	2	Fever, Cancer
ERBB2	2	Fever, Cancer
ERBB4	2	Fever, Dyspnea
ERCC6	2	Hypertension, Cancer
ERN1	2	Fever, Diabetes
ERVK-9	2	Fever, Heart Disease
ERVW-1	2	Fever, SARS-CoV
ESM1	2	Diabetes, Sepsis
ETFA	2	Dyspnea, Kidney Disease
ETS2	2	Pneumonia, Cancer
ETV3	2	Diabetes, Hypertension
ETV5	2	Diabetes, Hypertension
ETV6	2	Cancer, Thrombocytopenia
EZH2	2	Diabetes, Cancer
F	2	Viral Entry, Viral Life Cycle
F9	2	Sepsis, Coagulopathy
FABP3	2	Heart Disease, Hypertension
FADD	2	Diabetes, Hypertension
FADS1	2	Hypertension, Cancer
FAM13A	2	Cough, Lung Disease
FANCD2	2	Cancer, Thrombocytopenia
FASLG	2	Sepsis, Multiple Organ Failure
FBL	2	Fever, Thrombocytopenia
FBP1	2	Fever, Dyspnea
FBXO32	2	Diabetes, Sepsis
FBXW7	2	Diabetes, Cancer
FCN2	2	Fever, Sepsis
FCN3	2	Viral Entry, Viral Life Cycle
FER	2	Pneumonia, Sepsis



FGF19	2	Diabetes, Cancer
FGF23	2	Heart Disease, Kidney Disease
FGF7	2	Pneumonia, Lung Disease
FGFBP1	2	Kidney Disease, Hypertension
FGFR3	2	Fever, Cancer
FGL2	2	Fever, SARS-CoV
FH	2	Diabetes, Cancer
FLG	2	Fever, Diabetes
FLII	2	Cancer, Thrombocytopenia
FLNB	2	Fever, Lung Disease
FLOT2	2	Cancer, Thrombocytopenia
FLT1	2	Kidney Disease, Hypertension
FMO3	2	Diabetes, Hypertension
FOSL1	2	Pneumonia, Cancer
FOXA2	2	Lung Disease, Diabetes
FOXJ1	2	Fever, Lymphopenia
FSD1	2	Heart Disease, Cancer
FSD1L	2	Heart Disease, Cancer
FSTL1	2	Cancer, Acute Kidney Injury
FUS	2	Dyspnea, Cancer
FXYD2	2	Diabetes, Hypertension
FYB1	2	Fever, Thrombocytopenia
FZD7	2	Fever, Cancer
G	2	Viral Entry, Viral Life Cycle
GAA	2	Dyspnea, Heart Disease
GAD2	2	Kidney Disease, Diabetes
GADD45G	2	Kidney Disease, Lung Disease
GATA1	2	Coagulopathy, Thrombocytopenia
GATA6	2	Lung Disease, Diabetes
GATM	2	Kidney Disease, Diabetes
GCGR	2	Diabetes, Hypertension
GCH1	2	Diabetes, Hypertension
GCM1	2	Fever, Hypertension
GDE1	2	Cancer, Sepsis
GDNF	2	Fever, Diabetes
GEM	2	Fever, Sepsis
GFAP	2	Fever, Diabetes
GFPT1	2	Kidney Disease, Diabetes
GGT1	2	Diabetes, Hypertension
GGT2	2	Diabetes, Hypertension
GGTLC1	2	Diabetes, Hypertension
GGTLC3	2	Diabetes, Hypertension
GGTLC4P	2	Diabetes, Hypertension
GGTLC5P	2	Diabetes, Hypertension

GIF	2	Fever, Diabetes
GIMAP5	2	Diabetes, Lymphopenia
GIT2	2	Diabetes, Sepsis
GJA4	2	Hypertension, Sepsis
GJA5	2	Diabetes, Hypertension
GLIS3	2	Diabetes, Cancer
GLO1	2	Diabetes, Cancer
GNAS	2	Hypertension, Cancer
GNRH1	2	Hypertension, Cancer
GOT2	2	Diabetes, Hypertension
GP	2	Viral Entry, Viral Life Cycle
GP1BB	2	Coagulopathy, Thrombocytopenia
GP64	2	Viral Entry, Viral Life Cycle
GP9	2	Coagulopathy, Thrombocytopenia
GPBAR1	2	Kidney Disease, Diabetes
GPFR1	2	Heart Disease, Hypertension
GPNMB	2	Cancer, Acute Kidney Injury
GPR15	2	Viral Entry, Viral Life Cycle
GPRC5A	2	Pneumonia, Lung Disease
GPX3	2	Lung Disease, Cancer
GSTO1	2	Lung Disease, Cancer
GTF2I	2	Cancer, Thrombocytopenia
GYPB	2	Diabetes, Hypertension
GYPE	2	Diabetes, Hypertension
GZMA	2	Pneumonia, Lung Disease
GZMM	2	Cancer, Sepsis
H2AFX	2	Hypertension, Cancer
HA	2	Viral Entry, Viral Life Cycle
HABP2	2	Diabetes, Cancer
HAMP	2	Kidney Disease, Diabetes
HAVCR2	2	Fever, Cancer
HBA1	2	Kidney Disease, Diabetes
HBEGF	2	Kidney Disease, Acute Kidney Injury
HCCS	2	Pneumonia, Diabetes
HDAC6	2	Fever, Hypertension
HECTD4	2	Diabetes, Hypertension
HIPK2	2	Kidney Disease, Cancer
HLA-DOA	2	Fever, Diabetes
HLA-DQA1	2	Kidney Disease, Diabetes
HLA-DQB1	2	Diabetes, Lymphopenia
HLCS	2	Dyspnea, Thrombocytopenia
HMGCS2	2	Hypertension, Cancer
HNRNPA1	2	Dyspnea, Cancer
HNRNPA2B1	2	Lung Disease, Cancer

HOPX	2	Diabetes, Hypertension
HOTAIR	2	Heart Disease, Cancer
HOXA9	2	Lung Disease, Cancer
HRAS	2	Fever, Cancer
HS3ST5	2	Viral Entry, Viral Life Cycle
HSD11B1	2	Diabetes, Hypertension
HSD17B7	2	Diabetes, Cancer
HSF1	2	Diabetes, Cancer
HSP90AA1	2	Diabetes, Cancer
HSPA8	2	Fever, Viral Life Cycle
HTC2	2	Diabetes, Thrombocytopenia
HYAL1	2	Viral Entry, Viral Life Cycle
HYAL2	2	Viral Entry, Viral Life Cycle
HYAL3	2	Viral Entry, Viral Life Cycle
IAPP	2	Diabetes, Hypertension
IARS	2	Fever, Diabetes
ID2	2	Pneumonia, Hypertension
IDO1	2	Kidney Disease, Cancer
IDUA	2	Heart Disease, Hypertension
IER3	2	Fever, Hypertension
IFI16	2	Fever, Viral Life Cycle
IFIT1	2	Fever, Viral Life Cycle
IFITM2	2	Viral Entry, Viral Life Cycle
IFNAR1	2	Fever, Thrombocytopenia
IFNAR2	2	Fever, Lymphopenia
IFNL1	2	Fever, Kidney Disease
IFNL4	2	Fever, Coagulopathy
IGAN1	2	Kidney Disease, Diabetes
IGF2BP2	2	Diabetes, Hypertension
IGFBP1	2	Diabetes, Acute Kidney Injury
IGFBP2	2	Diabetes, Hypertension
IGHG3	2	Kidney Disease, Thrombocytopenia
III	2	Viral Entry, Viral Life Cycle
IKBKB	2	Pneumonia, Hypertension
IL12RB1	2	Sepsis, SARS-CoV
IL17B	2	Diabetes, Cancer
IL17C	2	Fever, Diabetes
IL17RA	2	Fever, Hypertension
IL1RL1	2	Lung Disease, Sepsis
IL20	2	Diabetes, Acute Kidney Injury
IL21	2	Fever, Diabetes
IL21R	2	Fever, Pneumonia
IL23R	2	Hypertension, Cancer
IL24	2	Fever, Cancer

IL2RB	2	Pneumonia, Diabetes
IL2RG	2	Pneumonia, Lymphopenia
IL3	2	Diabetes, Thrombocytopenia
IL6R	2	Fever, Diabetes
IL6ST	2	Fever, Pneumonia
ILF3	2	Fever, Viral Life Cycle
INPPL1	2	Diabetes, Hypertension
INSRR	2	Dyspnea, Hypertension
IQCB1	2	Kidney Disease, Hypertension
IRAK3	2	Pneumonia, Sepsis
IRAK4	2	Pneumonia, Sepsis
IRF8	2	Fever, Cancer
ISG15	2	Fever, Viral Life Cycle
ITGA2B	2	Hypertension, Thrombocytopenia
ITGAL	2	Lung Disease, Sepsis
ITGB5	2	Viral Entry, Viral Life Cycle
ITGB6	2	Viral Entry, Viral Life Cycle
JAG1	2	Kidney Disease, Diabetes
JPH3	2	Diabetes, Hypertension
K3	2	Viral Entry, Viral Life Cycle
K5	2	Viral Entry, Viral Life Cycle
KAT6A	2	Dyspnea, Cancer
KCNA5	2	Diabetes, Hypertension
KCNE1	2	Heart Disease, Diabetes
KCNH1	2	Heart Disease, Cancer
KCNJ1	2	Diabetes, Hypertension
KCNJ11	2	Diabetes, Hypertension
KCNJ5	2	Diabetes, Hypertension
KCNJ8	2	Hypertension, Sepsis
KCNMA1	2	Diabetes, Hypertension
KCNMB1	2	Kidney Disease, Hypertension
KCNQ1OT1	2	Kidney Disease, Diabetes
KDM1A	2	Hypertension, Cancer
KDM6A	2	Fever, Cancer
KHDRBS1	2	Fever, Cancer
KIF1B	2	Fever, Cancer
KIR2DL3	2	Heart Disease, Diabetes
KIR3DL1	2	Fever, Sepsis
KIR3DS1	2	Fever, Kidney Disease
KIT	2	Lung Disease, Cancer
KLF4	2	Pneumonia, Hypertension
KLK4	2	Kidney Disease, Hypertension
KMT2A	2	Kidney Disease, Cancer
KMT2B	2	Kidney Disease, Cancer

KPNA3	2	Viral Entry, Viral Life Cycle
L3	2	Viral Entry, Viral Life Cycle
LAD1	2	Diabetes, Hypertension
LAG3	2	Fever, Cancer
LAMP3	2	Fever, Viral Life Cycle
LAMTOR5	2	Cancer, Viral Life Cycle
LARP1BP2	2	Pneumonia, Sepsis
LARS2	2	Diabetes, Thrombocytopenia
LBP	2	Sepsis, Multiple Organ Failure
LCT	2	Pneumonia, Hypertension
LDLRAP1	2	Dyspnea, Hypertension
LIG4	2	Pneumonia, Diabetes
LILRB1	2	Diabetes, Cancer
LIN28A	2	Diabetes, Cancer
LIN28B	2	Diabetes, Cancer
LOC10272419 7	2	Diabetes, Hypertension
LONP1	2	Diabetes, Cancer
LOX	2	Heart Disease, Hypertension
LPAR1	2	Pneumonia, Hypertension
LPIN1	2	Hypertension, Acute Kidney Injury
LPIN2	2	Diabetes, Leukocytosis
LRBA	2	Pneumonia, Thrombocytopenia
LRP5	2	Diabetes, Hypertension
LRPPRC	2	Fever, Pneumonia
LRSAM1	2	Fever, Viral Life Cycle
LTB4R	2	Pneumonia, Sepsis
LUM	2	Fever, Lung Disease
LY96	2	Pneumonia, Sepsis
LYN	2	Hypertension, Cancer
M	2	Viral Entry, Viral Life Cycle
MAFB	2	Kidney Disease, Hypertension
MALAT1	2	Diabetes, Cancer
MAP1LC3B	2	Cancer, Sepsis
MAP2K1	2	Cancer, Coagulopathy
MAP2K3	2	Sepsis, Neutrophilia
MAP3K14	2	Fever, Lymphopenia
MAP3K8	2	Kidney Disease, Sepsis
MAP4K4	2	Diabetes, Lymphopenia
MAPT	2	Fever, Diabetes
MAS1	2	Kidney Disease, Hypertension
MAT1A	2	Hypertension, Sepsis
MAT2B	2	Diabetes, Hypertension
MAVS	2	Fever, Viral Life Cycle
MC3R	2	Diabetes, Hypertension

MC4R	2	Diabetes, Hypertension
MCAM	2	Pneumonia, Lung Disease
MDH1	2	Hypertension, Cancer
MDM4	2	Diabetes, Cancer
MEN1	2	Diabetes, Cancer
MGMT	2	Cancer, Thrombocytopenia
MGP	2	Kidney Disease, Diabetes
MID2	2	Viral Entry, Viral Life Cycle
MIR122	2	Fever, Sepsis
MIR141	2	Kidney Disease, Cancer
MIR145	2	Diabetes, Cancer
MIR15B	2	Fever, Cancer
MIR17HG	2	Hypertension, Cancer
MIR191	2	Kidney Disease, Cancer
MIR196B	2	Fever, Cancer
MIR199A1	2	Diabetes, Cancer
MIR199A2	2	Diabetes, Cancer
MIR200A	2	Kidney Disease, Cancer
MIR202	2	Hypertension, Cancer
MIR204	2	Diabetes, Hypertension
MIR210	2	Hypertension, Cancer
MIR212	2	Hypertension, Cancer
MIR214	2	Hypertension, Cancer
MIR23A	2	Hypertension, Cancer
MIR28	2	Fever, Cancer
MIR29A	2	Diabetes, Cancer
MIR29C	2	Pneumonia, Cancer
MIR30A	2	Fever, Cancer
MIR30D	2	Diabetes, Cancer
MIR320A	2	Diabetes, Cancer
MIR375	2	Diabetes, Cancer
MIR424	2	Hypertension, Cancer
MIR425	2	Hypertension, Cancer
MIR485	2	Fever, Cancer
MIR503	2	Diabetes, Hypertension
MIR509-1	2	Hypertension, Cancer
MIR663A	2	Fever, Cancer
MIR675	2	Heart Disease, Cancer
MIR93	2	Diabetes, Cancer
MIR96	2	Hypertension, Cancer
MKS1	2	Kidney Disease, Hypertension
MLYCD	2	Kidney Disease, Hypertension
MMAA	2	Dyspnea, Thrombocytopenia
MMAB	2	Dyspnea, Thrombocytopenia

MMACHC	2	Kidney Disease, Thrombocytopenia
MMP10	2	Kidney Disease, Hypertension
MMP12	2	Pneumonia, Hypertension
MMP13	2	Pneumonia, Sepsis
MMP14	2	Kidney Disease, Diabetes
MOG	2	Viral Entry, Viral Life Cycle
MPHOSPH8	2	Cancer, Viral Life Cycle
MPI	2	Coagulopathy, Thrombocytopenia
MPL	2	Coagulopathy, Thrombocytopenia
MPRIP	2	Fever, Cancer
MSH2	2	Fever, Cancer
MSH3	2	Diabetes, Cancer
MT1E	2	Pneumonia, Diabetes
MT2A	2	Heart Disease, Diabetes
MTR	2	Hypertension, Cancer
MUC4	2	Cancer, Thrombocytopenia
MUC5B	2	Cough, Lung Disease
MUT	2	Dyspnea, Thrombocytopenia
MUTYH	2	Diabetes, Cancer
MVK	2	Leukocytosis, Thrombocytopenia
MXI1	2	Kidney Disease, Thrombocytopenia
MYBPC3	2	Dyspnea, Heart Disease
MYH7	2	Heart Disease, Hypertension
MYO16	2	Kidney Disease, Diabetes
MYOD1	2	Hypertension, Cancer
NA	2	Viral Entry, Viral Life Cycle
NAGLU	2	Fever, Cancer
NBEAL2	2	Coagulopathy, Thrombocytopenia
NBR1	2	Fever, Pneumonia
NCR1	2	Fever, Cancer
ND1	2	Hypertension, Sepsis
ND5	2	Diabetes, Hypertension
NECTIN2	2	Viral Entry, Viral Life Cycle
NEDD4L	2	Hypertension, Viral Life Cycle
NEFH	2	Dyspnea, Hypertension
NES	2	Kidney Disease, Cancer
NEUROD1	2	Diabetes, Cancer
NFATC2	2	Pneumonia, Diabetes
NFE2	2	Sepsis, Thrombocytopenia
NFKB2	2	Pneumonia, Lymphopenia
NGF	2	Diabetes, Hypertension
NHS	2	Diabetes, Sepsis
NIPBL	2	Pneumonia, Thrombocytopenia
NKX2-5	2	Heart Disease, Hypertension

NLRC4	2	Pneumonia, Leukocytosis
NLRP1	2	Kidney Disease, Sepsis
NLRP2	2	Fever, Lymphopenia
NLRP6	2	Fever, Hypertension
NME1	2	Diabetes, Hypertension
NOG	2	Kidney Disease, Hypertension
NOTCH2	2	Diabetes, Hypertension
NP	2	Viral Entry, Viral Life Cycle
NPHP1	2	Kidney Disease, Hypertension
NPHP4	2	Kidney Disease, Hypertension
NPHS1	2	Kidney Disease, Hypertension
NPR1	2	Kidney Disease, Hypertension
NPR3	2	Heart Disease, Hypertension
NPY	2	Diabetes, Hypertension
NR5A2	2	Diabetes, Viral Life Cycle
NRSN1	2	Fever, Lung Disease
NS	2	Viral Entry, Viral Life Cycle
NSA2	2	Kidney Disease, Diabetes
NT5C2	2	Hypertension, Cancer
NTF3	2	Pneumonia, Diabetes
NUDT1	2	Hypertension, Cancer
NUP107	2	Kidney Disease, Viral Life Cycle
NXF1	2	Fever, Lung Disease
OAS2	2	Fever, Viral Life Cycle
OAS3	2	Fever, Viral Life Cycle
OCA2	2	Fever, Heart Disease
OFD1	2	Pneumonia, Hypertension
OLR1	2	Diabetes, Hypertension
OPN1LW	2	Fever, Cancer
OPRM1	2	Fever, Cancer
OR10A4	2	Diabetes, Hypertension
ORAI1	2	Fever, Hypertension
ORF2	2	Viral Entry, Viral Life Cycle
OXTR	2	Fever, Hypertension
P06935	2	Viral Entry, Viral Life Cycle
P12473	2	Viral Entry, Viral Life Cycle
P2RX4	2	Lung Disease, Hypertension
P2RX6	2	Lung Disease, Hypertension
P2RY1	2	Lung Disease, Diabetes
P2RY2	2	Lung Disease, Hypertension
P2RY6	2	Fever, Hypertension
PA	2	Viral Entry, Viral Life Cycle
PABPC1	2	Fever, Viral Life Cycle
PAFAH1B1	2	Cancer, Thrombocytopenia



PALB2	2	Cancer, Thrombocytopenia
PARN	2	Cough, Thrombocytopenia
PAX2	2	Kidney Disease, Hypertension
PAX5	2	Hypertension, Cancer
PAX6	2	Fever, Diabetes
PB1	2	Viral Entry, Viral Life Cycle
PB2	2	Viral Entry, Viral Life Cycle
PBK	2	Fever, Cancer
PCBD1	2	Kidney Disease, Diabetes
PCBP1	2	Fever, Viral Life Cycle
PCNA	2	Fever, Cancer
PCSK1	2	Diabetes, Hypertension
PCSK6	2	Hypertension, Cancer
PDCD4	2	Cancer, Sepsis
PDGFB	2	Hypertension, Thrombocytopenia
PDGFRB	2	Hypertension, Thrombocytopenia
PDLIM5	2	Fever, Cancer
PDLIM7	2	Fever, Cancer
PDPN	2	Kidney Disease, Cancer
PEBP1	2	Pneumonia, Cancer
PELI1	2	Fever, Heart Disease
PER2	2	Cough, Cancer
PGPEP1	2	Pneumonia, Hypertension
PHB	2	Diabetes, Cancer
PIK3R2	2	Fever, Cancer
PIM1	2	Diabetes, Cancer
PITX2	2	Heart Disease, Hypertension
PKD2	2	Kidney Disease, Hypertension
PKM	2	Hypertension, Cancer
PLAU	2	Pneumonia, Thrombocytopenia
PLCE1	2	Hypertension, Cancer
PLEK	2	Cancer, Thrombocytopenia
PLEKHA7	2	Pneumonia, Hypertension
PLXNB1	2	Diabetes, Cancer
PML	2	Fever, Viral Life Cycle
PMS2	2	Fever, Cancer
PNP	2	Pneumonia, Lymphopenia
PNPLA3	2	Fever, Diabetes
POU5F1	2	Hypertension, Cancer
PPARD	2	Diabetes, Cancer
PPARGC1B	2	Diabetes, Hypertension
PPID	2	Diabetes, Viral Life Cycle
PPP1R13L	2	Fever, Cancer
PPP1R3A	2	Diabetes, Hypertension

PPP3CA	2	Heart Disease, Sepsis
PRCP	2	Pneumonia, Hypertension
PRDM1	2	Fever, Cancer
PRKACG	2	Fever, Thrombocytopenia
PRKCB	2	Kidney Disease, Hypertension
PRKDC	2	Lung Disease, Cancer
PRKG1	2	Heart Disease, Hypertension
PRL	2	Diabetes, Cancer
PRMT1	2	Pneumonia, Cancer
PROCR	2	Pneumonia, Sepsis
PROM1	2	Fever, Cancer
PROX1	2	Diabetes, Viral Life Cycle
PRRT2	2	Cancer, SARS-CoV
PRSS2	2	Pneumonia, Leukocytosis
PSEN2	2	Diabetes, Hypertension
PSG2	2	Lung Disease, Cancer
PSMD10	2	Diabetes, Cancer
PTGDR	2	Cancer, Neutrophilia
PTGDS	2	Pneumonia, Diabetes
PTGES	2	Hypertension, Cancer
PTGIR	2	Cough, Heart Disease
PTPA	2	Fever, Cancer
PTPN2	2	Diabetes, Cancer
PTPN6	2	Pneumonia, Diabetes
PTPRD	2	Diabetes, Hypertension
PVT1	2	Diabetes, Cancer
PXN	2	Hypertension, Cancer
Q80FJ1	2	Viral Entry, Viral Life Cycle
RAB1A	2	Cancer, Viral Life Cycle
RAB1B	2	Cancer, Viral Life Cycle
RAB5A	2	Fever, Viral Life Cycle
RABGEF1	2	Hypertension, Cancer
RACK1	2	Diabetes, Cancer
RAD51C	2	Cancer, Thrombocytopenia
RAMP2	2	Kidney Disease, Hypertension
RAP1A	2	Hypertension, Cancer
RAP1B	2	Pneumonia, Hypertension
RARA	2	Cancer, Thrombocytopenia
RARRES3	2	Fever, Cancer
RASA1	2	Hypertension, Coagulopathy
RASSF1	2	Lung Disease, Cancer
RB1	2	Hypertension, SARS-CoV
RBFOX2	2	Fever, Hypertension
RBP4	2	Kidney Disease, Diabetes

RECQL4	2	Kidney Disease, Cancer
REL	2	Fever, Sepsis
RELB	2	Kidney Disease, Sepsis
REM1	2	Fever, Diabetes
RET	2	Hypertension, Cancer
RFT1	2	Diabetes, Coagulopathy
RHOA	2	Hypertension, Cancer
RIPK3	2	Fever, Cancer
RNLS	2	Kidney Disease, Hypertension
RNU6-392P	2	Pneumonia, Sepsis
ROCK1	2	Diabetes, Hypertension
ROCK2	2	Hypertension, Viral Life Cycle
RPAIN	2	Pneumonia, Diabetes
RPL17	2	Fever, Cancer
RPS19	2	Pneumonia, Thrombocytopenia
RPS6KA3	2	Fever, Cancer
RPS6KB1	2	Hypertension, Sepsis
RPTOR	2	Hypertension, Sepsis
RRAS	2	Cancer, Coagulopathy
RRM1	2	Fever, Thrombocytopenia
RTL1	2	Fever, Sepsis
S	2	Viral Entry, Viral Life Cycle
S100A6	2	Hypertension, Cancer
SAA1	2	Kidney Disease, Sepsis
SACM1L	2	Kidney Disease, Diabetes
SCD	2	Diabetes, Cancer
SCG2	2	Diabetes, Hypertension
SCN10A	2	Heart Disease, Hypertension
SCN5A	2	Dyspnea, Heart Disease
SCO1	2	Dyspnea, Heart Disease
SDC1	2	Cancer, Sepsis
SDC2	2	Kidney Disease, Cancer
SDCCAG8	2	Dyspnea, Hypertension
SDHB	2	Hypertension, Cancer
SDS	2	Diabetes, Hypertension
SEC14L2	2	Fever, Lung Disease
SEC61A1	2	Kidney Disease, Diabetes
SELENOP	2	Diabetes, Sepsis
SERPING1	2	Fever, Sepsis
SETBP1	2	Cancer, Neutrophilia
SGCG	2	Pneumonia, Sepsis
SGPL1	2	Pneumonia, Lymphopenia
SGSM3	2	Diabetes, Cancer
SH2B3	2	Diabetes, Hypertension

SH2D1A	2	Fever, Thrombocytopenia
SH2D3A	2	Fever, SARS-CoV
SIRT2	2	Diabetes, Cancer
SIVA1	2	Viral Entry, Viral Life Cycle
SKP2	2	Kidney Disease, Cancer
SLC11A2	2	Pneumonia, Kidney Disease
SLC12A1	2	Kidney Disease, Hypertension
SLC19A2	2	Diabetes, Thrombocytopenia
SLC22A1	2	Diabetes, Thrombocytopenia
SLC22A12	2	Hypertension, Acute Kidney Injury
SLC22A2	2	Kidney Disease, Hypertension
SLC22A3	2	Hypertension, Cancer
SLC22A6	2	Kidney Disease, Hypertension
SLC25A1	2	Dyspnea, Cancer
SLC26A4	2	Fever, Hypertension
SLC29A1	2	Pneumonia, Diabetes
SLC2A10	2	Diabetes, Hypertension
SLC2A12	2	Diabetes, Hypertension
SLC2A4	2	Diabetes, Hypertension
SLC37A4	2	Diabetes, Hypertension
SLC39A8	2	Hypertension, Sepsis
SLC47A1	2	Kidney Disease, Diabetes
SLC4A7	2	Cough, Hypertension
SLC5A1	2	Heart Disease, Diabetes
SLC5A2	2	Diabetes, Hypertension
SLC5A5	2	Fever, Cancer
SLC6A2	2	Diabetes, Hypertension
SLC7A7	2	Kidney Disease, Thrombocytopenia
SLC7A9	2	Kidney Disease, Diabetes
SLC9A1	2	Hypertension, Cancer
SLC9A6	2	Pneumonia, Sepsis
SLC9C1	2	Kidney Disease, Hypertension
SMAD4	2	Hypertension, Cancer
SMARCA1	2	Fever, Cancer
SMARCA4	2	Hypertension, Cancer
SMARCB1	2	Cancer, Viral Life Cycle
SMN1	2	Cough, Hypertension
SMN2	2	Cough, Hypertension
SMOX	2	Pneumonia, Sepsis
SNAI1	2	Hypertension, Cancer
SNCA	2	Fever, Cancer
SNX3	2	Viral Entry, Viral Life Cycle
SORBS1	2	Diabetes, Hypertension
SORCS1	2	Kidney Disease, Diabetes

SORD	2	Kidney Disease, Diabetes
SORL1	2	Diabetes, Hypertension
SOSTDC1	2	Kidney Disease, Diabetes
SOX4	2	Fever, Cancer
SOX9	2	Dyspnea, Cancer
SP1	2	Hypertension, Cancer
SPATA2	2	Fever, Cancer
SPG7	2	Fever, Cancer
SPHK1	2	Hypertension, Cancer
SPHK2	2	Fever, Lymphopenia
SPINK1	2	Diabetes, Leukocytosis
SPRR2A	2	Lung Disease, Diabetes
SREBF2	2	Kidney Disease, Diabetes
SRF	2	Hypertension, Cancer
SRPK2	2	Fever, Viral Life Cycle
SRR	2	Diabetes, Hypertension
SSRP1	2	Fever, Sepsis
ST3GAL4	2	Diabetes, Hypertension
STAT4	2	Fever, Kidney Disease
STAT6	2	Kidney Disease, Cancer
STC1	2	Lung Disease, Cancer
STMN1	2	Cough, Cancer
STS	2	Hypertension, Cancer
STT3B	2	Dyspnea, Thrombocytopenia
STX2	2	Kidney Disease, Thrombocytopenia
SUCNR1	2	Diabetes, Hypertension
SUFU	2	Cancer, Sepsis
SULT1E1	2	Kidney Disease, Sepsis
TACR3	2	Fever, Hypertension
TAGLN2	2	Diabetes, Cancer
TAP1	2	Fever, Hypertension
TAT	2	Sepsis, Lymphopenia
TBPL1	2	Cough, Kidney Disease
TBX1	2	Kidney Disease, Cancer
TBX3	2	Kidney Disease, Hypertension
TBX5	2	Heart Disease, Hypertension
TBXAS1	2	Hypertension, Thrombocytopenia
TCF3	2	Cough, Cancer
TEAD4	2	Heart Disease, Cancer
TERF2IP	2	Hypertension, Cancer
TESC	2	Kidney Disease, Hypertension
TF	2	Cancer, Acute Kidney Injury
TFE3	2	Diabetes, Cancer
TFF3	2	Kidney Disease, Acute Kidney Injury

TFRC	2	Viral Entry, Viral Life Cycle
TGFB2	2	Kidney Disease, Hypertension
TGFBR1	2	Kidney Disease, Hypertension
THAS	2	Kidney Disease, Lung Disease
TIMELESS	2	Fever, Pneumonia
TIMP2	2	Diabetes, Sepsis
TIMP3	2	Kidney Disease, Diabetes
TLE1	2	Diabetes, Cancer
TLR6	2	Pneumonia, Hypertension
TLR7	2	Fever, Sepsis
TMED2	2	Fever, Lung Disease
TMEM173	2	Fever, Cancer
TMEM237	2	Kidney Disease, Hypertension
TNFRSF11A	2	Pneumonia, Hypertension
TNFRSF14	2	Viral Entry, Viral Life Cycle
TNFRSF18	2	Fever, Cancer
TNFRSF8	2	Fever, Pneumonia
TNFRSF9	2	Fever, Diabetes
TNFSF12	2	Pneumonia, Lymphopenia
TNFSF14	2	Diabetes, Hypertension
TNFSF4	2	Pneumonia, Kidney Disease
TNIP1	2	Sepsis, Viral Life Cycle
TOP2B	2	Cough, Viral Life Cycle
TPD52	2	Diabetes, Cancer
TPI1	2	Fever, Cancer
TPMT	2	Cancer, Thrombocytopenia
TPPP	2	Fever, Lung Disease
TPT1	2	Hypertension, Cancer
TRAF1	2	Pneumonia, Lung Disease
TRAF3	2	Fever, SARS-CoV
TREH	2	Kidney Disease, Diabetes
TRIB3	2	Diabetes, Cancer
TRIM10	2	Viral Entry, Viral Life Cycle
TRIM11	2	Viral Entry, Viral Life Cycle
TRIM26	2	Viral Entry, Viral Life Cycle
TRIM28	2	Cancer, Viral Life Cycle
TRIM31	2	Viral Entry, Viral Life Cycle
TRIM38	2	Viral Entry, Viral Life Cycle
TRIM62	2	Viral Entry, Viral Life Cycle
TRIM63	2	Fever, Diabetes
TRIM8	2	Viral Entry, Viral Life Cycle
TRNK	2	Dyspnea, Hypertension
TRNL1	2	Diabetes, Hypertension
TRNS1	2	Dyspnea, Hypertension

TRPC3	2	Heart Disease, Hypertension
TRPC5	2	Kidney Disease, Hypertension
TRPM4	2	Heart Disease, Sepsis
TRPM6	2	Diabetes, Hypertension
TSG101	2	Fever, Viral Life Cycle
TSPO	2	Diabetes, Cancer
TTN	2	Heart Disease, Diabetes
TXN2	2	Diabetes, Hypertension
TXNDC5	2	Fever, Diabetes
TXNRD1	2	Diabetes, Cancer
TXNRD3	2	Diabetes, Hypertension
UBAC1	2	Pneumonia, Sepsis
UBD	2	Kidney Disease, Diabetes
UBE2S	2	Hypertension, Cancer
UCP1	2	Diabetes, Hypertension
UCP3	2	Diabetes, Hypertension
UL74	2	Viral Entry, Viral Life Cycle
UNC119	2	Lung Disease, Lymphopenia
UNC13A	2	Dyspnea, Diabetes
USO1	2	Fever, Lung Disease
USP18	2	Fever, Thrombocytopenia
USP9X	2	Dyspnea, Cancer
UTRN	2	Fever, Cancer
UVRAG	2	Viral Entry, Viral Life Cycle
VAPB	2	Dyspnea, Viral Life Cycle
VAV1	2	Cancer, Lymphopenia
VEGFC	2	Lung Disease, Diabetes
VKORC1	2	Heart Disease, Coagulopathy
VLDLR	2	Fever, Sepsis
VPS18	2	Viral Entry, Viral Life Cycle
VPS33A	2	Dyspnea, Thrombocytopenia
WASF1	2	Diabetes, Hypertension
WASF3	2	Diabetes, Hypertension
WDHD1	2	Diabetes, Cancer
WDR19	2	Kidney Disease, Hypertension
WISP1	2	Lung Disease, Hypertension
WNT4	2	Pneumonia, Kidney Disease
WRAP53	2	Cancer, Thrombocytopenia
WRN	2	Diabetes, Cancer
WWOX	2	Cough, Fever
WWP1	2	Viral Entry, Viral Life Cycle
WWP2	2	Viral Entry, Viral Life Cycle
XPO5	2	Hypertension, Cancer
XRCC2	2	Cancer, Thrombocytopenia

XRCC4	2	Hypertension, Lymphopenia
XYLT1	2	Kidney Disease, Hypertension
YAP1	2	Hypertension, Cancer
YWHAE	2	Cancer, Thrombocytopenia
YY1AP1	2	Hypertension, Cancer
ZBTB24	2	Pneumonia, Lymphopenia
ZBTB7C	2	Diabetes, Cancer
ZC3HAV1	2	Cancer, Viral Life Cycle
ZEB1	2	Diabetes, Cancer
ZGLP1	2	Fever, Diabetes
ZMYND10	2	Cough, Fever
ZNF300	2	Diabetes, Cancer
ZNF639	2	Viral Entry, Viral Life Cycle

**S1-Supplementary file:** The disease-gene association gene set extracted from disgenet database for COVID-19



Gene Symbol	Gene ID	Disease Name	Disease ID	Direct Evidence	Inference Network	Inference Score	Reference Count
CCL2	6347	COVID-19	MESH:C00065 7245	marker/mechanism	Active Hexose Correlated Compound baricitinib Chloroquine Hydroxychloroquine Lopinavir lopinavir-ritonavir drug combination Losartan Ritonavir	17.32	13
IL6	3569	COVID-19	MESH:C00065 7245	marker/mechanism	Active Hexose Correlated Compound Chloroquine Hydroxychloroquine Lopinavir lopinavir-ritonavir drug combination Losartan Ribavirin Ritonavir	13.18	13
TNF	7124	COVID-19	MESH:C00065 7245	marker/mechanism	Active Hexose Correlated Compound betulinic acid camostat Chloroquine Lopinavir Losartan Ribavirin Ritonavir	10.91	11
IL10	3586	COVID-19	MESH:C00065 7245	marker/mechanism	Active Hexose Correlated Compound Hydroxychloroquine Losartan Ribavirin	8.17	8
CCL3	6348	COVID-19	MESH:C00065 7245	marker/mechanism	Lopinavir Losartan Ritonavir	7.94	5
IL2	3558	COVID-19	MESH:C00065 7245	marker/mechanism	Active Hexose Correlated Compound Chloroquine Ribavirin	7	7
TMPRSS2	7113	COVID-19	MESH:C00065 7245	marker/mechanism	camostat	5.61	1
IL7	3574	COVID-19	MESH:C00065 7245	marker/mechanism	Ritonavir	4.15	3
CXCL10	3627	COVID-19	MESH:C00065 7245	marker/mechanism	Ritonavir	3.56	3
AGT	183	COVID-19	MESH:C00065 7245	marker/mechanism	Losartan	3.21	2
CSF3	1440	COVID-19	MESH:C00065 7245	marker/mechanism			1
IL2RA	3559	COVID-19	MESH:C00065 7245	marker/mechanism			2
IL8	1E+08	COVID-19	MESH:C00065 7245	marker/mechanism			1

ACE2	59272	COVI D-19	MESH:C00065 7245	marker/mechanism ther apeutic	Losartan	4.02	9
OAS1	4938	COVI D-19	MESH:C000657245		chloroquine diphosphate Interferon-alpha Ribavirin	11.86	4
CASP3	836	COVI D-19	MESH:C000657245		Active Hexose Correlated Compound betulinic acid Chloroquine chloroquine diphosphate Hydroxychloroquine Losartan Ribavirin Riton avir	11.36	11
ICAM1	3383	COVI D-19	MESH:C000657245		Chloroquine Lopinavir Losartan Ribavirin Ritonavir	10.82	8
CASP8	841	COVI D-19	MESH:C000657245		betulinic acid Chloroquine chloroquine diphosphate Losartan Ribavirin	9.95	8
LMNA	4000	COVI D-19	MESH:C000657245		Lopinavir lopinavir-ritonavir drug combination Ritonavir	9.82	5
IFNG	3458	COVI D-19	MESH:C000657245		Active Hexose Correlated Compound Chloroquine Losartan Ribavirin Ritonavir	9.4	8
CYP3A4	1576	COVI D-19	MESH:C000657245		Chloroquine Lopinavir Losartan Mefloquine Ritonavir	9.37	7
ZMPSTE2 4	10269	COVI D-19	MESH:C000657245		Lopinavir Ritonavir	9.07	3
IL1B	3553	COVI D-19	MESH:C000657245		Active Hexose Correlated Compound Chloroquine Hydroxychloroquine Lopinavir L osartan Ribavirin	9.02	10
PARP1	142	COVI D-19	MESH:C000657245		betulinic acid cepharanthine Chloroquine Losartan Ritonavir	8.93	7
SCARB1	949	COVI D-19	MESH:C000657245		Chloroquine Losartan Ritonavir	8.92	5
MAP1LC3 B	81631	COVI D-19	MESH:C000657245		betulinic acid Chloroquine chloroquine diphosphate	8.85	6
AKT1	207	COVI D-19	MESH:C000657245		Active Hexose Correlated Compound betulinic acid Chloroquine chloroquine diphosphate Ribavirin	8.84	8
CXCL8	3576	COVI D-19	MESH:C000657245		Active Hexose Correlated Compound Chloroquine Hydroxychloroquine lopinavir- ritonavir drug combination Ritonavir	8.84	8

ABCB1	5243	COVI D-19	MESH:C000657245	cepharanthine Chloroquine Mefloquine Ritonavir	8.35	5
TP53	7157	COVI D-19	MESH:C000657245	cepharanthine Chloroquine lopinavir-ritonavir drug combination Losartan Ritonavir	8.34	8
ADIPOQ	9370	COVI D-19	MESH:C000657245	Lopinavir Losartan Ritonavir	7.94	4
ABCB11	8647	COVI D-19	MESH:C000657245	Lopinavir Losartan Ritonavir	7.84	4
MTOR	2475	COVI D-19	MESH:C000657245	cepharanthine Chloroquine Ribavirin	7.84	6
CYP2D6	1565	COVI D-19	MESH:C000657245	Active Hexose Correlated Compound Chloroquine Ritonavir	7.79	5
TLR4	7099	COVI D-19	MESH:C000657245	Active Hexose Correlated Compound betulinic acid Losartan	7.79	3
GLB1	2720	COVI D-19	MESH:C000657245	lopinavir-ritonavir drug combination Ritonavir	7.77	4
CDH1	999	COVI D-19	MESH:C000657245	Chloroquine Losartan selamectin	7.45	4
RB1	5925	COVI D-19	MESH:C000657245	betulinic acid Lopinavir Ritonavir	7.44	3
CXCL1	2919	COVI D-19	MESH:C000657245	Active Hexose Correlated Compound Losartan Ritonavir	7.35	4
BCL2	596	COVI D-19	MESH:C000657245	betulinic acid Chloroquine chloroquine diphosphate Losartan Ritonavir	7.32	8
CCND1	595	COVI D-19	MESH:C000657245	betulinic acid Losartan Ribavirin Ritonavir	7.25	6
PTHLH	5744	COVI D-19	MESH:C000657245	betulinic acid Losartan	7.21	2
CASP7	840	COVI D-19	MESH:C000657245	betulinic acid Chloroquine Ribavirin	7.18	6
BIRC5	332	COVI D-19	MESH:C000657245	betulinic acid Chloroquine Ritonavir	7.13	5
CTNNB1	1499	COVI D-19	MESH:C000657245	betulinic acid Chloroquine Losartan	7.03	4

GPT	2875	COVI D-19	MESH:C000657245	Chloroquine chloroquine diphosphate Losartan	7.02	6
CDKN1A	1026	COVI D-19	MESH:C000657245	betulinic acid Chloroquine lopinavir-ritonavir drug combination Ritonavir	6.94	7
NOS3	4846	COVI D-19	MESH:C000657245	camostat Losartan Ritonavir	6.89	4
CASP9	842	COVI D-19	MESH:C000657245	betulinic acid Chloroquine chloroquine diphosphate Losartan	6.68	7
CLDN1	9076	COVI D-19	MESH:C000657245	Chloroquine Hydroxychloroquine	6.65	3
ATP1A1	476	COVI D-19	MESH:C000657245	Chloroquine Losartan	6.61	3
CTSL	1514	COVI D-19	MESH:C000657245	Chloroquine chloroquine diphosphate	6.55	5
OCLN	1.01E+ 08	COVI D-19	MESH:C000657245	Chloroquine Hydroxychloroquine	6.46	3
NOS2	4843	COVI D-19	MESH:C000657245	Active Hexose Correlated Compound Chloroquine Hydroxychloroquine Losartan	6.43	5
NFKB1	4790	COVI D-19	MESH:C000657245	Chloroquine Losartan Ritonavir	6.4	5
SNAI1	6615	COVI D-19	MESH:C000657245	Chloroquine Losartan	6.38	3
AFP	174	COVI D-19	MESH:C000657245	chloroquine diphosphate Losartan	6.37	4
CDK6	1021	COVI D-19	MESH:C000657245	betulinic acid Ritonavir	6.37	3
CYP2C8	1558	COVI D-19	MESH:C000657245	Chloroquine Ritonavir	6.36	4
TXNIP	10628	COVI D-19	MESH:C000657245	chloroquine diphosphate Hydroxychloroquine	6.33	4
RELA	5970	COVI D-19	MESH:C000657245	betulinic acid Chloroquine Losartan Ritonavir	6.27	6
TJP1	7082	COVI D-19	MESH:C000657245	Losartan Ritonavir	6.26	3

TIMP2	7077	COVI D-19	MESH:C000657245	betulinic acid Losartan	6.14	2
MYC	4609	COVI D-19	MESH:C000657245	Losartan Ribavirin Ritonavir	6.13	5
CCN1	3491	COVI D-19	MESH:C000657245	Chloroquine chloroquine diphosphate	6.12	5
MUC3	666339	COVI D-19	MESH:C000657245	Active Hexose Correlated Compound	6.1	1
MCL1	4170	COVI D-19	MESH:C000657245	cepharanthine Chloroquine	6.09	3
NR1H4	9971	COVI D-19	MESH:C000657245	Ritonavir selamectin	6.09	3
BECN1	8678	COVI D-19	MESH:C000657245	Chloroquine chloroquine diphosphate	6.03	5
BAK1	578	COVI D-19	MESH:C000657245	Losartan Ritonavir	6.02	3
CYP7A1	1581	COVI D-19	MESH:C000657245	Chloroquine Ritonavir	5.9	4
CCKAR	886	COVI D-19	MESH:C000657245	camostat	5.88	1
CYP-35B3	187092	COVI D-19	MESH:C000657245	Chloroquine	5.88	2
ALB	213	COVI D-19	MESH:C000657245	chloroquine diphosphate Losartan Ritonavir	5.87	5
BAX	581	COVI D-19	MESH:C000657245	betulinic acid Chloroquine chloroquine diphosphate Losartan	5.86	7
F3	2152	COVI D-19	MESH:C000657245	chloroquine diphosphate Losartan	5.83	4
NFKBIA	4792	COVI D-19	MESH:C000657245	Active Hexose Correlated Compound betulinic acid Ritonavir	5.83	4
MAPT	4137	COVI D-19	MESH:C000657245	Chloroquine Losartan	5.8	3
MIR24-2	407013	COVI D-19	MESH:C000657245	betulinic acid	5.78	1

AAK1	22848	COVI D-19	MESH:C000657245	baricitinib	5.75	2
MMP9	4318	COVI D-19	MESH:C000657245	betulinic acid Chloroquine Losartan	5.73	4
KCNH2	3757	COVI D-19	MESH:C000657245	cepharanthine Mefloquine	5.7	1
GAK	2580	COVI D-19	MESH:C000657245	baricitinib	5.69	2
TNFSF10	8743	COVI D-19	MESH:C000657245	chloroquine diphosphate Ribavirin	5.66	4
FASLG	356	COVI D-19	MESH:C000657245	Losartan Ritonavir	5.65	3
TGFB1	7040	COVI D-19	MESH:C000657245	betulinic acid chloroquine diphosphate Losartan	5.62	5
SIN3A	25942	COVI D-19	MESH:C000657245	selamectin	5.61	1
VEGFA	7422	COVI D-19	MESH:C000657245	betulinic acid Losartan Ribavirin	5.57	5
GJA1	2697	COVI D-19	MESH:C000657245	Chloroquine Losartan	5.56	3
NHE3	33939	COVI D-19	MESH:C000657245	Losartan	5.56	1
SAA2	6289	COVI D-19	MESH:C000657245	baricitinib	5.54	2
IL12B	3593	COVI D-19	MESH:C000657245	Chloroquine Ribavirin	5.51	5
OSM	5008	COVI D-19	MESH:C000657245	baricitinib	5.51	2
LEP	3952	COVI D-19	MESH:C000657245	Lopinavir Ritonavir	5.49	3
JAK3	3718	COVI D-19	MESH:C000657245	baricitinib	5.46	2
ABCC1	4363	COVI D-19	MESH:C000657245	Chloroquine Mefloquine	5.43	3

SAA1	6288	COVI D-19	MESH:C000657245	baricitinib	5.34	2
SQSTM1	8878	COVI D-19	MESH:C000657245	Chloroquine Hydroxychloroquine	5.34	3
MXD1	4084	COVI D-19	MESH:C000657245	selamectin	5.31	1
MIR663A	724033	COVI D-19	MESH:C000657245	chloroquine diphosphate	5.3	3
TIMP1	7076	COVI D-19	MESH:C000657245	betulinic acid Losartan	5.29	2
CYP2C9	1559	COVI D-19	MESH:C000657245	Losartan Ritonavir	5.28	3
ABCC2	1244	COVI D-19	MESH:C000657245	Chloroquine Lopinavir	5.21	5
ACTA2	59	COVI D-19	MESH:C000657245	betulinic acid Losartan	5.2	2
IFNL3	282617	COVI D-19	MESH:C000657245	Ribavirin	5.18	3
JAK1	3716	COVI D-19	MESH:C000657245	baricitinib	5.18	2
SREBF1	6720	COVI D-19	MESH:C000657245	Losartan Ritonavir	5.16	3
MIR154	406946	COVI D-19	MESH:C000657245	chloroquine diphosphate	5.15	3
CYP-35B1	178803	COVI D-19	MESH:C000657245	Chloroquine	5.13	2
NCOA2	10499	COVI D-19	MESH:C000657245	selamectin	5.13	1
ABCB1B	18669	COVI D-19	MESH:C000657245	selamectin	5.09	1
CYP-35B2	187093	COVI D-19	MESH:C000657245	Chloroquine	5.08	2
FAS	355	COVI D-19	MESH:C000657245	Hydroxychloroquine Ribavirin	5.06	4

FASN	2194	COVI D-19	MESH:C000657245	Losartan Ritonavir	5.05	3
IL4	3565	COVI D-19	MESH:C000657245	Active Hexose Correlated Compound Ribavirin	5.04	4
MUC4	4585	COVI D-19	MESH:C000657245	Active Hexose Correlated Compound	5.03	1
APP	351	COVI D-19	MESH:C000657245	Chloroquine chloroquine diphosphate	5.02	5
JAK2	3717	COVI D-19	MESH:C000657245	baricitinib	5.01	2
TLR2A	1.02E+ 08	COVI D-19	MESH:C000657245	Chloroquine	4.99	2
ABCB1A	18671	COVI D-19	MESH:C000657245	selamectin	4.97	1
MUC2	4583	COVI D-19	MESH:C000657245	Active Hexose Correlated Compound	4.96	1
STAT3	6774	COVI D-19	MESH:C000657245	betulinic acid Ritonavir	4.96	3
APOC3	345	COVI D-19	MESH:C000657245	lopinavir-ritonavir drug combination	4.92	2
NDUFA4L 2	56901	COVI D-19	MESH:C000657245	chloroquine diphosphate	4.92	3
COL1A1	1277	COVI D-19	MESH:C000657245	chloroquine diphosphate Losartan	4.9	4
EGFR	1956	COVI D-19	MESH:C000657245	betulinic acid Chloroquine	4.87	3
MXRA5	25878	COVI D-19	MESH:C000657245	chloroquine diphosphate	4.84	3
STAT4	6775	COVI D-19	MESH:C000657245	Active Hexose Correlated Compound	4.83	1
TFF3	7033	COVI D-19	MESH:C000657245	Active Hexose Correlated Compound	4.82	1
IL1A	3552	COVI D-19	MESH:C000657245	Chloroquine Losartan	4.81	3



ENTPD3	956	COVI D-19	MESH:C000657245	chloroquine diphosphate	4.8	3
MMP2	4313	COVI D-19	MESH:C000657245	betulinic acid Losartan	4.77	2
HSPA5	3309	COVI D-19	MESH:C000657245	Chloroquine Losartan	4.76	3
HMOX1	3162	COVI D-19	MESH:C000657245	Lopinavir Losartan Ritonavir	4.72	4
CDK3	1018	COVI D-19	MESH:C000657245	Ritonavir	4.71	2
MIR145	406937	COVI D-19	MESH:C000657245	chloroquine diphosphate	4.67	3
APOB	338	COVI D-19	MESH:C000657245	lopinavir-ritonavir drug combination	4.66	2
CA9	768	COVI D-19	MESH:C000657245	betulinic acid	4.64	1
CAT	847	COVI D-19	MESH:C000657245	Chloroquine Lopinavir Losartan	4.63	6
REN1	19701	COVI D-19	MESH:C000657245	Losartan	4.63	1
ESR1	2099	COVI D-19	MESH:C000657245	Ritonavir selamectin	4.62	3
SOX2	6657	COVI D-19	MESH:C000657245	Active Hexose Correlated Compound	4.59	1
OASL	8638	COVI D-19	MESH:C000657245	chloroquine diphosphate	4.57	3
PLA2G2A	5320	COVI D-19	MESH:C000657245	betulinic acid	4.57	1
TOP1	7150	COVI D-19	MESH:C000657245	betulinic acid	4.56	1
APOA1	335	COVI D-19	MESH:C000657245	lopinavir-ritonavir drug combination	4.54	2
IFI44L	10964	COVI D-19	MESH:C000657245	chloroquine diphosphate	4.53	3

BCL2L1	598	COVI D-19	MESH:C000657245	Chloroquine Ritonavir	4.52	4
AGTR1B	11608	COVI D-19	MESH:C000657245	Losartan	4.51	1
GPM6B	2824	COVI D-19	MESH:C000657245	chloroquine diphosphate	4.51	3
CTSK	1513	COVI D-19	MESH:C000657245	betulinic acid	4.5	1
NLRC5	84166	COVI D-19	MESH:C000657245	Ritonavir	4.5	2
RNF19B	127544	COVI D-19	MESH:C000657245	chloroquine diphosphate	4.5	3
GSDME	1687	COVI D-19	MESH:C000657245	chloroquine diphosphate	4.49	3
ANTXR1	84168	COVI D-19	MESH:C000657245	chloroquine diphosphate	4.48	3
IL1R1	3554	COVI D-19	MESH:C000657245	Active Hexose Correlated Compound	4.48	1
COLEC12	81035	COVI D-19	MESH:C000657245	chloroquine diphosphate	4.46	3
FGF19	9965	COVI D-19	MESH:C000657245	Ritonavir	4.46	2
IL17A	3605	COVI D-19	MESH:C000657245	Active Hexose Correlated Compound	4.46	1
VDAC1	7416	COVI D-19	MESH:C000657245	betulinic acid	4.45	1
HK2	3099	COVI D-19	MESH:C000657245	betulinic acid	4.44	1
MYD88	4615	COVI D-19	MESH:C000657245	Active Hexose Correlated Compound	4.44	1
SLC10A2	6555	COVI D-19	MESH:C000657245	chloroquine diphosphate	4.44	3
GBP1	2633	COVI D-19	MESH:C000657245	chloroquine diphosphate	4.43	3

IFI44	10561	COVI D-19	MESH:C000657245	chloroquine diphosphate	4.43	3
HBG1	3047	COVI D-19	MESH:C000657245	Chloroquine	4.42	2
ITPA	3704	COVI D-19	MESH:C000657245	Ribavirin	4.42	3
NACC1	112939	COVI D-19	MESH:C000657245	Chloroquine	4.42	2
HILPDA	29923	COVI D-19	MESH:C000657245	chloroquine diphosphate	4.41	3
RIPK2	8767	COVI D-19	MESH:C000657245	chloroquine diphosphate	4.41	3
SPON1	10418	COVI D-19	MESH:C000657245	chloroquine diphosphate	4.41	3
BST2	684	COVI D-19	MESH:C000657245	chloroquine diphosphate	4.4	3
MMP23	26561	COVI D-19	MESH:C000657245	Losartan	4.4	1
PTGS2	5743	COVI D-19	MESH:C000657245	Chloroquine chloroquine diphosphate Losartan	4.4	6
COQ6	51004	COVI D-19	MESH:C000657245	Chloroquine	4.38	2
CXCL6	6372	COVI D-19	MESH:C000657245	Ritonavir	4.38	2
CYP4A3	298423	COVI D-19	MESH:C000657245	Ritonavir	4.38	2
ERGIC3	51614	COVI D-19	MESH:C000657245	Chloroquine	4.38	2
DDX58	23586	COVI D-19	MESH:C000657245	chloroquine diphosphate	4.37	3
SLC29A3	55315	COVI D-19	MESH:C000657245	Ribavirin	4.37	3
ACKR3	57007	COVI D-19	MESH:C000657245	chloroquine diphosphate	4.36	3

CIITA	4261	COVI D-19	MESH:C000657245	Ritonavir	4.36	2
IL32	9235	COVI D-19	MESH:C000657245	Ritonavir	4.35	2
LAMB3	3914	COVI D-19	MESH:C000657245	chloroquine diphosphate	4.35	3
NOTCH4	4855	COVI D-19	MESH:C000657245	Ritonavir	4.35	2
PTK2B	2185	COVI D-19	MESH:C000657245	Mefloquine	4.35	1
STRAP	11171	COVI D-19	MESH:C000657245	Chloroquine	4.34	2
TNFAIP2	7127	COVI D-19	MESH:C000657245	chloroquine diphosphate	4.34	3
FMN1	342184	COVI D-19	MESH:C000657245	Chloroquine	4.33	2
RT1-DA	294269	COVI D-19	MESH:C000657245	Losartan	4.33	1
FGF7	2252	COVI D-19	MESH:C000657245	chloroquine diphosphate	4.32	3
GPR182	11318	COVI D-19	MESH:C000657245	Chloroquine	4.32	2
TNFSF11	8600	COVI D-19	MESH:C000657245	betulinic acid	4.32	1
ISG20	3669	COVI D-19	MESH:C000657245	chloroquine diphosphate	4.31	3
MMP13	4322	COVI D-19	MESH:C000657245	betulinic acid	4.31	1
GLP1R	2740	COVI D-19	MESH:C000657245	Chloroquine	4.3	2
REG3G	130120	COVI D-19	MESH:C000657245	Losartan	4.3	1
RSAD2	91543	COVI D-19	MESH:C000657245	chloroquine diphosphate	4.3	3

CUBN	8029	COVI D-19	MESH:C000657245	Losartan	4.29	1
M6PR	4074	COVI D-19	MESH:C000657245	Chloroquine	4.29	2
MYOM2	9172	COVI D-19	MESH:C000657245	Chloroquine	4.29	2
TYMS	7298	COVI D-19	MESH:C000657245	betulinic acid	4.29	1
RT1-S3	294228	COVI D-19	MESH:C000657245	Losartan	4.28	1
SMAD3	4088	COVI D-19	MESH:C000657245	betulinic acid	4.28	1
ODC1	4953	COVI D-19	MESH:C000657245	Active Hexose Correlated Compound	4.27	1
SLC51A	200931	COVI D-19	MESH:C000657245	Ritonavir	4.26	2
BCL2A1	597	COVI D-19	MESH:C000657245	chloroquine diphosphate	4.25	3
HSPB1	3315	COVI D-19	MESH:C000657245	Active Hexose Correlated Compound	4.25	1
MMP10	4319	COVI D-19	MESH:C000657245	chloroquine diphosphate	4.25	3
SCCPDH	51097	COVI D-19	MESH:C000657245	Chloroquine	4.25	2
WNT1	7471	COVI D-19	MESH:C000657245	Losartan	4.25	1
PLPP3	8613	COVI D-19	MESH:C000657245	chloroquine diphosphate	4.24	3
E2F3	1871	COVI D-19	MESH:C000657245	Ritonavir	4.23	2
MARCKS	4082	COVI D-19	MESH:C000657245	chloroquine diphosphate	4.23	3
CDK5	1020	COVI D-19	MESH:C000657245	Ritonavir	4.22	2

PDGFD	80310	COVI D-19	MESH:C000657245	Losartan	4.22	1
SLC22A9	114571	COVI D-19	MESH:C000657245	Losartan	4.22	1
SOD2	6648	COVI D-19	MESH:C000657245	chloroquine diphosphate Losartan	4.21	4
AQP2	359	COVI D-19	MESH:C000657245	Chloroquine	4.19	2
ADORA2 A	135	COVI D-19	MESH:C000657245	chloroquine diphosphate	4.18	3
CFLAR	8837	COVI D-19	MESH:C000657245	Hydroxychloroquine	4.18	1
IFNA2	3440	COVI D-19	MESH:C000657245	Ribavirin	4.18	3
PPARG	5468	COVI D-19	MESH:C000657245	Losartan Ritonavir	4.18	3
CTRB1	1504	COVI D-19	MESH:C000657245	Chloroquine	4.17	2
ISG15	9636	COVI D-19	MESH:C000657245	chloroquine diphosphate	4.17	3
NPHS2	7827	COVI D-19	MESH:C000657245	Losartan	4.17	1
NPR1	4881	COVI D-19	MESH:C000657245	Losartan	4.17	1
PSMB3	5691	COVI D-19	MESH:C000657245	Ritonavir	4.17	2
NDST1	3340	COVI D-19	MESH:C000657245	Losartan	4.16	1
PSMA1	5682	COVI D-19	MESH:C000657245	Ritonavir	4.16	2
TOP2A	7153	COVI D-19	MESH:C000657245	betulinic acid	4.16	1
FLT4	2324	COVI D-19	MESH:C000657245	Losartan	4.15	1

GJA5	2702	COVI D-19	MESH:C000657245	Chloroquine	4.15	2
NPPC	4880	COVI D-19	MESH:C000657245	Chloroquine	4.15	2
PSMB5	5693	COVI D-19	MESH:C000657245	Ritonavir	4.15	2
TLR9	54106	COVI D-19	MESH:C000657245	Chloroquine	4.15	2
TRIM63	84676	COVI D-19	MESH:C000657245	Chloroquine	4.15	2
RBL1	5933	COVI D-19	MESH:C000657245	Ritonavir	4.14	2
ASIC1	41	COVI D-19	MESH:C000657245	Chloroquine	4.13	2
SLC2A9	56606	COVI D-19	MESH:C000657245	Losartan	4.13	1
SLC22A12	116085	COVI D-19	MESH:C000657245	Losartan	4.12	1
AHCY	191	COVI D-19	MESH:C000657245	Ribavirin	4.11	3
GJC1	10052	COVI D-19	MESH:C000657245	Chloroquine	4.11	2
AQP5	362	COVI D-19	MESH:C000657245	Chloroquine	4.1	2
EDN3	1908	COVI D-19	MESH:C000657245	Losartan	4.1	1
SCP2	6342	COVI D-19	MESH:C000657245	Ritonavir	4.1	2
ATP2A2	488	COVI D-19	MESH:C000657245	chloroquine diphosphate	4.09	3
CROT	54677	COVI D-19	MESH:C000657245	Ritonavir	4.09	2
CYB5R3	1727	COVI D-19	MESH:C000657245	Ritonavir	4.09	2

ACSS2	55902	COVI D-19	MESH:C000657245	Ritonavir	4.08	2
ATP1A3	478	COVI D-19	MESH:C000657245	Losartan	4.08	1
E2F2	1870	COVI D-19	MESH:C000657245	Ritonavir	4.08	2
PDLIM3	27295	COVI D-19	MESH:C000657245	Losartan	4.08	1
SLC29A1	2030	COVI D-19	MESH:C000657245	Ribavirin	4.08	3
TOMM20	9804	COVI D-19	MESH:C000657245	Losartan	4.08	1
CD34	947	COVI D-19	MESH:C000657245	Chloroquine	4.07	2
TLR7	51284	COVI D-19	MESH:C000657245	Chloroquine	4.07	2
FOS	2353	COVI D-19	MESH:C000657245	Losartan Ritonavir	4.06	3
RBL2	5934	COVI D-19	MESH:C000657245	Ritonavir	4.06	2
REL	5966	COVI D-19	MESH:C000657245	Ritonavir	4.06	2
MIR155	406947	COVI D-19	MESH:C000657245	Chloroquine	4.05	2
MYH11	4629	COVI D-19	MESH:C000657245	Losartan	4.05	1
CYP4B1	1580	COVI D-19	MESH:C000657245	Ritonavir	4.04	2
EIF4E	1977	COVI D-19	MESH:C000657245	Ribavirin	4.04	3
VSNL1	7447	COVI D-19	MESH:C000657245	Chloroquine	4.04	2
HMBS	3145	COVI D-19	MESH:C000657245	Chloroquine	4.02	2



ABCC4	10257	COVI D-19	MESH:C000657245	Mefloquine	4.01	1
MPO	4353	COVI D-19	MESH:C000657245	Active Hexose Correlated Compound	4.01	1
TLR2	7097	COVI D-19	MESH:C000657245	chloroquine diphosphate	4.01	3
GPD1	2819	COVI D-19	MESH:C000657245	Ritonavir	4	2
NFE2L2	4780	COVI D-19	MESH:C000657245	Losartan Ritonavir	4	3
TLR6	10333	COVI D-19	MESH:C000657245	Chloroquine	4	2
ENG	2022	COVI D-19	MESH:C000657245	Losartan	3.99	1
CXCR4	7852	COVI D-19	MESH:C000657245	chloroquine diphosphate	3.98	3
HSP70	652971	COVI D-19	MESH:C000657245	Chloroquine	3.98	2
PDK2	5164	COVI D-19	MESH:C000657245	Chloroquine	3.98	2
PTH1R	5745	COVI D-19	MESH:C000657245	Losartan	3.98	1
TLR1	7096	COVI D-19	MESH:C000657245	Chloroquine	3.98	2
UCP3	7352	COVI D-19	MESH:C000657245	Losartan	3.98	1
SLC6A4	6532	COVI D-19	MESH:C000657245	Ribavirin	3.97	3
SLC7A11	23657	COVI D-19	MESH:C000657245	chloroquine diphosphate	3.97	3
CDKN2B	1030	COVI D-19	MESH:C000657245	Ritonavir	3.96	2
ITGA3	3675	COVI D-19	MESH:C000657245	Losartan	3.96	1

PCNA	5111	COVI D-19	MESH:C000657245	betulinic acid	3.96	1
TM7SF2	7108	COVI D-19	MESH:C000657245	Chloroquine	3.96	2
AMBP	259	COVI D-19	MESH:C000657245	Losartan	3.95	1
CYP8B1	1582	COVI D-19	MESH:C000657245	Ritonavir	3.95	2
ELN	2006	COVI D-19	MESH:C000657245	Losartan	3.95	1
HIF1A	3091	COVI D-19	MESH:C000657245	betulinic acid	3.95	1
NPHS1	4868	COVI D-19	MESH:C000657245	Losartan	3.95	1
CYP51	13121	COVI D-19	MESH:C000657245	Ritonavir	3.94	2
SERPINA3	12	COVI D-19	MESH:C000657245	Chloroquine	3.94	2
SFRP2	6423	COVI D-19	MESH:C000657245	Losartan	3.94	1
ACTG2	72	COVI D-19	MESH:C000657245	Losartan	3.93	1
COL4A2	1284	COVI D-19	MESH:C000657245	Losartan	3.93	1
IKBKG	8517	COVI D-19	MESH:C000657245	Chloroquine	3.93	2
TWIST1	7291	COVI D-19	MESH:C000657245	Losartan	3.93	1
AGTR1	185	COVI D-19	MESH:C000657245	Losartan	3.92	1
AGTR2	186	COVI D-19	MESH:C000657245	Losartan	3.91	1
ATP1A2	477	COVI D-19	MESH:C000657245	Losartan	3.91	1

CD274	29126	COVI D-19	MESH:C000657245	Chloroquine	3.91	2
ALOX15	246	COVI D-19	MESH:C000657245	Losartan	3.9	1
EPO	2056	COVI D-19	MESH:C000657245	Ribavirin	3.9	3
SDC2	6383	COVI D-19	MESH:C000657245	Losartan	3.9	1
ALDH1B1	219	COVI D-19	MESH:C000657245	Chloroquine	3.89	2
APOD	347	COVI D-19	MESH:C000657245	Chloroquine	3.89	2
CXCL5	6374	COVI D-19	MESH:C000657245	Ritonavir	3.89	2
POSTN	10631	COVI D-19	MESH:C000657245	Losartan	3.88	1
SORT1	6272	COVI D-19	MESH:C000657245	Chloroquine	3.88	2
EHHADH	1962	COVI D-19	MESH:C000657245	Ritonavir	3.87	2
LTB	4050	COVI D-19	MESH:C000657245	Chloroquine	3.87	2
LUM	4060	COVI D-19	MESH:C000657245	Losartan	3.87	1
PODXL	5420	COVI D-19	MESH:C000657245	Losartan	3.87	1
WT1	7490	COVI D-19	MESH:C000657245	Losartan	3.87	1
AGTR1A	11607	COVI D-19	MESH:C000657245	Losartan	3.85	1
DHCR7	1717	COVI D-19	MESH:C000657245	Ritonavir	3.85	2
LIF	3976	COVI D-19	MESH:C000657245	Ritonavir	3.85	2

MYH6	4624	COVI D-19	MESH:C000657245	Losartan	3.85	1
UBC	7316	COVI D-19	MESH:C000657245	Chloroquine	3.85	2
IL15	3600	COVI D-19	MESH:C000657245	Chloroquine	3.84	2
MUC1	4582	COVI D-19	MESH:C000657245	Chloroquine	3.84	2
CAMK2A	815	COVI D-19	MESH:C000657245	Losartan	3.83	1
CCNE2	9134	COVI D-19	MESH:C000657245	Ritonavir	3.83	2
DES	1674	COVI D-19	MESH:C000657245	Losartan	3.83	1
ITGA6	3655	COVI D-19	MESH:C000657245	Losartan	3.83	1
S1PR1	1901	COVI D-19	MESH:C000657245	Losartan	3.83	1
HSPH1	10808	COVI D-19	MESH:C000657245	Ritonavir	3.82	2
SLC10A1	6554	COVI D-19	MESH:C000657245	Ritonavir	3.82	2
TXN	7295	COVI D-19	MESH:C000657245	Ribavirin	3.82	3
AGER	177	COVI D-19	MESH:C000657245	Losartan	3.81	1
IL12A	3592	COVI D-19	MESH:C000657245	Ribavirin	3.81	3
NCF2	4688	COVI D-19	MESH:C000657245	Losartan	3.81	1
NRF1	4899	COVI D-19	MESH:C000657245	Losartan	3.81	1
MMP7	4316	COVI D-19	MESH:C000657245	Losartan	3.8	1

PECAM1	5175	COVI D-19	MESH:C000657245	Losartan	3.8	1
CCL20	6364	COVI D-19	MESH:C000657245	Ritonavir	3.79	2
EIF4EBP1	1978	COVI D-19	MESH:C000657245	Ribavirin	3.79	3
OSGIN1	29948	COVI D-19	MESH:C000657245	Chloroquine	3.79	2
AKT2	208	COVI D-19	MESH:C000657245	Losartan	3.78	1
CD74	972	COVI D-19	MESH:C000657245	Losartan	3.78	1
GJB2	2706	COVI D-19	MESH:C000657245	Chloroquine	3.78	2
HAVCR1	26762	COVI D-19	MESH:C000657245	Losartan	3.78	1
VEGFC	7424	COVI D-19	MESH:C000657245	Losartan	3.78	1
CYP3A5	1577	COVI D-19	MESH:C000657245	Ritonavir	3.77	2
E2F1	1869	COVI D-19	MESH:C000657245	Ritonavir	3.77	2
FBXO32	114907	COVI D-19	MESH:C000657245	Chloroquine	3.77	2
DCN	1634	COVI D-19	MESH:C000657245	Losartan	3.76	1
STC2	8614	COVI D-19	MESH:C000657245	Chloroquine	3.76	2
SYP	6855	COVI D-19	MESH:C000657245	Chloroquine	3.76	2
ATG5	9474	COVI D-19	MESH:C000657245	Chloroquine	3.75	2
IL5	3567	COVI D-19	MESH:C000657245	Ribavirin	3.74	3

MGP	4256	COVI D-19	MESH:C000657245	Losartan	3.74	1
MYLK	4638	COVI D-19	MESH:C000657245	Losartan	3.74	1
TNFRSF10 A	8797	COVI D-19	MESH:C000657245	Chloroquine	3.74	2
ABCB4	5244	COVI D-19	MESH:C000657245	Ritonavir	3.72	2
ASS1	445	COVI D-19	MESH:C000657245	Chloroquine	3.72	2
CCR2	729230	COVI D-19	MESH:C000657245	Losartan	3.72	1
COL4A1	1282	COVI D-19	MESH:C000657245	Losartan	3.72	1
ERBB3	2065	COVI D-19	MESH:C000657245	Chloroquine	3.72	2
GPNMB	10457	COVI D-19	MESH:C000657245	Chloroquine	3.72	2
PRLR	5618	COVI D-19	MESH:C000657245	Chloroquine	3.72	2
SELP	6403	COVI D-19	MESH:C000657245	Losartan	3.72	1
CCL11	6356	COVI D-19	MESH:C000657245	Chloroquine	3.71	2
CCND2	894	COVI D-19	MESH:C000657245	Ritonavir	3.71	2
CYP1A1	1543	COVI D-19	MESH:C000657245	Losartan Ritonavir	3.71	3
CYP3A23/ 3A1	25642	COVI D-19	MESH:C000657245	Ritonavir	3.71	2
HSP90AA 1	3320	COVI D-19	MESH:C000657245	Ritonavir	3.71	2
MYH7	4625	COVI D-19	MESH:C000657245	Losartan	3.71	1

S100A4	6275	COVI D-19	MESH:C000657245	Losartan	3.7	1
SOD3	6649	COVI D-19	MESH:C000657245	Losartan	3.7	1
TNC	3371	COVI D-19	MESH:C000657245	Losartan	3.7	1
CCL4	6351	COVI D-19	MESH:C000657245	Ritonavir	3.69	2
EDNRA	1909	COVI D-19	MESH:C000657245	Losartan	3.69	1
MMP14	4323	COVI D-19	MESH:C000657245	Losartan	3.69	1
PRKCA	5578	COVI D-19	MESH:C000657245	Ritonavir	3.69	2
TSC22D1	8848	COVI D-19	MESH:C000657245	Losartan	3.69	1
PDGFA	5154	COVI D-19	MESH:C000657245	Losartan	3.68	1
CEBPA	1050	COVI D-19	MESH:C000657245	Ritonavir	3.67	2
CXCL12	6387	COVI D-19	MESH:C000657245	Ritonavir	3.67	2
FADS2	9415	COVI D-19	MESH:C000657245	Chloroquine	3.66	2
FGF1	2246	COVI D-19	MESH:C000657245	Chloroquine	3.66	2
GRIN2B	2904	COVI D-19	MESH:C000657245	Chloroquine	3.66	2
SRC	6714	COVI D-19	MESH:C000657245	Ritonavir	3.66	2
GPX4	2879	COVI D-19	MESH:C000657245	Chloroquine	3.65	2
MAPK3	5595	COVI D-19	MESH:C000657245	betulinic acid Losartan	3.65	2

PDGFRB	5159	COVI D-19	MESH:C000657245	Losartan	3.65	1
FLT1	2321	COVI D-19	MESH:C000657245	Losartan	3.64	1
MAPK1	5594	COVI D-19	MESH:C000657245	betulinic acid Losartan	3.64	2
SPARC	6678	COVI D-19	MESH:C000657245	Losartan	3.64	1
BMP2	650	COVI D-19	MESH:C000657245	Losartan	3.63	1
CHUK	1147	COVI D-19	MESH:C000657245	Chloroquine	3.63	2
LOX	4015	COVI D-19	MESH:C000657245	Losartan	3.63	1
PDGFB	5155	COVI D-19	MESH:C000657245	Losartan	3.63	1
CASP12	1.01E+ 08	COVI D-19	MESH:C000657245	Chloroquine	3.62	2
CYBA	1535	COVI D-19	MESH:C000657245	Losartan	3.62	1
KNG1	3827	COVI D-19	MESH:C000657245	Losartan	3.62	1
NPY	4852	COVI D-19	MESH:C000657245	Losartan	3.62	1
PRKCB	5579	COVI D-19	MESH:C000657245	Losartan	3.62	1
HSPA1B	3304	COVI D-19	MESH:C000657245	Chloroquine	3.61	2
PON1	5444	COVI D-19	MESH:C000657245	Ritonavir	3.61	2
CYBB	1536	COVI D-19	MESH:C000657245	Losartan	3.6	1
CYP2C19	1557	COVI D-19	MESH:C000657245	Ritonavir	3.6	2



REN	5972	COVI D-19	MESH:C000657245	Losartan	3.6	1
EIF2S1	1965	COVI D-19	MESH:C000657245	Losartan	3.59	1
NOX4	50507	COVI D-19	MESH:C000657245	Losartan	3.59	1
NR0B2	8431	COVI D-19	MESH:C000657245	Chloroquine	3.59	2
CDK4	1019	COVI D-19	MESH:C000657245	Ritonavir	3.58	2
NCF1	653361	COVI D-19	MESH:C000657245	Losartan	3.58	1
CASP1	834	COVI D-19	MESH:C000657245	Ritonavir	3.57	2
CDH2	1000	COVI D-19	MESH:C000657245	Chloroquine	3.57	2
LPL	4023	COVI D-19	MESH:C000657245	Ritonavir	3.57	2
NPPB	4879	COVI D-19	MESH:C000657245	Losartan	3.57	1
NOS1	4842	COVI D-19	MESH:C000657245	Losartan	3.56	1
ACE	1636	COVI D-19	MESH:C000657245	Losartan	3.55	1
CCNA2	890	COVI D-19	MESH:C000657245	Ritonavir	3.55	2
CTSB	1508	COVI D-19	MESH:C000657245	Chloroquine	3.55	2
UGT1A1	54658	COVI D-19	MESH:C000657245	Ritonavir	3.55	2
CDK2	1017	COVI D-19	MESH:C000657245	Ritonavir	3.54	2
ERBB2	2064	COVI D-19	MESH:C000657245	Chloroquine	3.54	2

IKBKB	3551	COVI D-19	MESH:C000657245	Chloroquine	3.54	2
RUNX2	860	COVI D-19	MESH:C000657245	Losartan	3.54	1
ADRB2	154	COVI D-19	MESH:C000657245	Losartan	3.53	1
ALOX5	240	COVI D-19	MESH:C000657245	Losartan	3.52	1
CTSD	1509	COVI D-19	MESH:C000657245	Chloroquine	3.52	2
ITGAM	3684	COVI D-19	MESH:C000657245	Chloroquine	3.52	2
KDR	3791	COVI D-19	MESH:C000657245	Losartan	3.52	1
ATM	472	COVI D-19	MESH:C000657245	Chloroquine	3.51	2
COL3A1	1281	COVI D-19	MESH:C000657245	Losartan	3.51	1
CYP2B6	1555	COVI D-19	MESH:C000657245	Ritonavir	3.51	2
LCN2	3934	COVI D-19	MESH:C000657245	Chloroquine	3.51	2
CXCL2	2920	COVI D-19	MESH:C000657245	Ritonavir	3.5	2
UCP2	7351	COVI D-19	MESH:C000657245	Losartan	3.5	1
CDKN1B	1027	COVI D-19	MESH:C000657245	Ritonavir	3.48	2
HSPD1	3329	COVI D-19	MESH:C000657245	Chloroquine	3.47	2
INS1	16333	COVI D-19	MESH:C000657245	Ritonavir	3.47	2
NPPA	4878	COVI D-19	MESH:C000657245	Losartan	3.47	1

PLAT	5327	COVI D-19	MESH:C000657245	Losartan	3.47	1
TNFRSF10 B	8795	COVI D-19	MESH:C000657245	Chloroquine	3.47	2
ATF4	468	COVI D-19	MESH:C000657245	Chloroquine	3.46	2
CLU	1191	COVI D-19	MESH:C000657245	Chloroquine	3.46	2
SCD1	20249	COVI D-19	MESH:C000657245	Chloroquine	3.46	2
CCNB1	891	COVI D-19	MESH:C000657245	Ritonavir	3.44	2
CPT1A	1374	COVI D-19	MESH:C000657245	Losartan	3.44	1
PRL	5617	COVI D-19	MESH:C000657245	Losartan	3.44	1
CYP11A1	1583	COVI D-19	MESH:C000657245	Chloroquine	3.43	2
APOE	348	COVI D-19	MESH:C000657245	Chloroquine	3.42	2
CD36	948	COVI D-19	MESH:C000657245	Losartan	3.4	1
CSF2	1437	COVI D-19	MESH:C000657245	Chloroquine	3.39	2
CYP17A1	1586	COVI D-19	MESH:C000657245	Chloroquine	3.36	2
POMC	5443	COVI D-19	MESH:C000657245	Chloroquine	3.36	2
STAR	6770	COVI D-19	MESH:C000657245	Chloroquine	3.36	2
EGF	1950	COVI D-19	MESH:C000657245	Chloroquine	3.34	2
ABCG2	9429	COVI D-19	MESH:C000657245	Chloroquine	3.33	2

CCL5	6352	COVI D-19	MESH:C000657245	Losartan	3.33	1
FN1	2335	COVI D-19	MESH:C000657245	Losartan	3.33	1
NR1I2	8856	COVI D-19	MESH:C000657245	Ritonavir	3.33	2
PPARGC1 A	10891	COVI D-19	MESH:C000657245	Losartan	3.33	1
VIM	7431	COVI D-19	MESH:C000657245	Losartan	3.33	1
CREB1	1385	COVI D-19	MESH:C000657245	Losartan	3.32	1
HMGCR	3156	COVI D-19	MESH:C000657245	Losartan	3.32	1
TRP53	22059	COVI D-19	MESH:C000657245	Chloroquine	3.32	2
CYCS	54205	COVI D-19	MESH:C000657245	Losartan	3.3	1
GSK3B	2932	COVI D-19	MESH:C000657245	Losartan	3.27	1
JUN	3725	COVI D-19	MESH:C000657245	Ritonavir	3.26	2
VCAM1	7412	COVI D-19	MESH:C000657245	Losartan	3.26	1
EDN1	1906	COVI D-19	MESH:C000657245	Losartan	3.25	1
SERPINE1	5054	COVI D-19	MESH:C000657245	Losartan	3.24	1
CYP1A2	1544	COVI D-19	MESH:C000657245	Ritonavir	3.21	2
PPARA	5465	COVI D-19	MESH:C000657245	Losartan	3.18	1
DDIT3	1649	COVI D-19	MESH:C000657245	Chloroquine	3.13	2

GSR	2936	COVI D-19	MESH:C000657245	Chloroquine	3.12	2
SOD1	6647	COVI D-19	MESH:C000657245	Chloroquine	3.1	2

**S2-Supplementary file: The curated gene-sets of COVID-19 extracted from The Comparative Toxicogenomics Database (CTD) database**