## **Supplementary figure legend**

**Figure S1.** Gene set enrichment analysis of top DEGs of GDS1028 dataset (performed via Enricher). (a) BioPlanet(b) KEGG (c) WikiPathways (d) PheWeb 2019 (e) GWAS catalog 2019 (f) Jensen disease. This dataset contains the expression profiling of peripheral blood mononuclear cells (PBMC) from 10 adult hospitalized patients with SARS and four healthy controls (41).

## **Supplementary tables legends**

**Table S1**. Top 100 selected DEGs (deferentially expressed genes) of some subgroups from GreinGSE52405 dataset. The data is obtained through iLINCS and analyzed by Grein. The tested subgroups included the C57BL/6J mice infected with MA15 (mouse-adopted severe acute respiratory syndrome coronavirus) at four days post-infection. The differences in the gene expression level (signature) between three experimental groups and two control groups were analyzed in this study.

**Table S2**. The complete signature of the MA15 group data from GreinGSE52405 dataset obtained through iLINCS and analyzed by Grein. The tested subgroups included the C57BL/6J mice infected with MA15 (mouse-adopted severe acute respiratory syndrome coronavirus) at four days post-infection. The differences in the gene expression level (signature) between three experimental groups and two control groups were analyzed in this study.

**Table S3**. The list of all proteins in the network and node centralities (degree and betweenness) of the tested subgroups of GreinGSE52405 dataset (the C57BL/6J mice at four days post-infection with MA15, as three experimental groups, and two control groups) obtained through analysis of the protein-protein interaction network.

**Table S4**. Top 100 selected DEGs (deferentially expressed genes) of GDS1028 dataset, obtained through iLINCS. This dataset contains the expression profiling of peripheral blood mononuclear cells (PBMC) from 10 adult hospitalized patients with SARS and four healthy controls (41).

**Table S5**. The complete signature of GDS1028 dataset, obtained through iLINCS and analyzed by Grein. This dataset contains the expression profiling of peripheral blood mononuclear cells (PBMC) from 10 adult hospitalized patients with SARS and four healthy controls (41).