Supporting information

Real-time PCR

RNA was extracted from cell homogenates using TRIzol (Invitrogen). Removal of residual DNA was performed with RNase free DNase (Roche Applied Science). cDNA (20 µl) was prepared from 1 µg of RNA using random primers and M-MLV reverse transcriptase (Invitrogen). One microliter of the cDNA solution was then used together with gene specific primers (Supplementary Table 4) and the Light Cycler TaqMan Master kit (Roche Applied Science) following the manufacturer´s protocol. The housekeeping gene RNApolII was used as an endogenous control. Real-time quantitative PCR was performed using a Light Cycler 2.0 sequence detection system with 26 capillary format. PCR cycling conditions were: 95ºC for 15 minutes, 40 cycles of 95ºC for 20 seconds and 60ºC for 1 minute. PCR data were obtained with the Light Cycler Probe design software version 4.1 (Roche Applied Science) and quantified by a standard curve method (Livak & Schmittgen 2001).

References

Livak, K. J. and Schmittgen, T. D. (2001) Analysis of relative gene expression data using real-time quantitative PCR and the 2(-Delta Delta C(T)) Method. *Methods,* **25,** 402-408.

Supporting Tables

Table S1: shRNAs used to silence DISC1 in SH-SY5Y cells

NAME	shRNA commercial REFERENCE	SEQUENCE
SILENCED 1	TRCN0000118997	5'-CCGAGGAGATTAGATCATTAAC-3'
SILENCED 4	TRCN0000119000	5'-CGATTGCTTATCCAG-3'

Table S2: shRNA used to silence DISC1 in neurons

shRNA	SEQUENCE
DISC1 shRNA#1	5'-GGCAAACACTGTGAAGTGC-3'

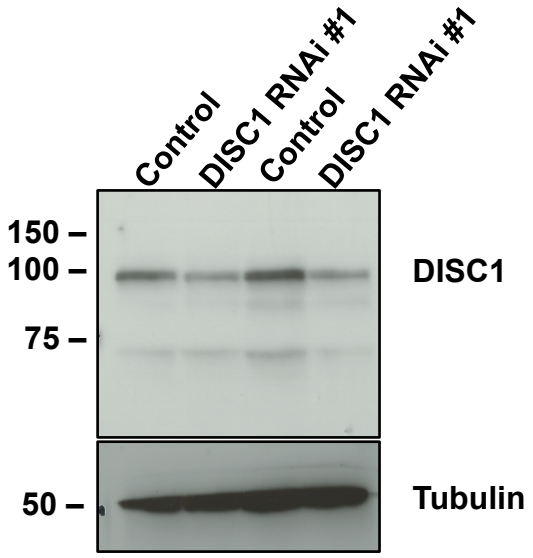
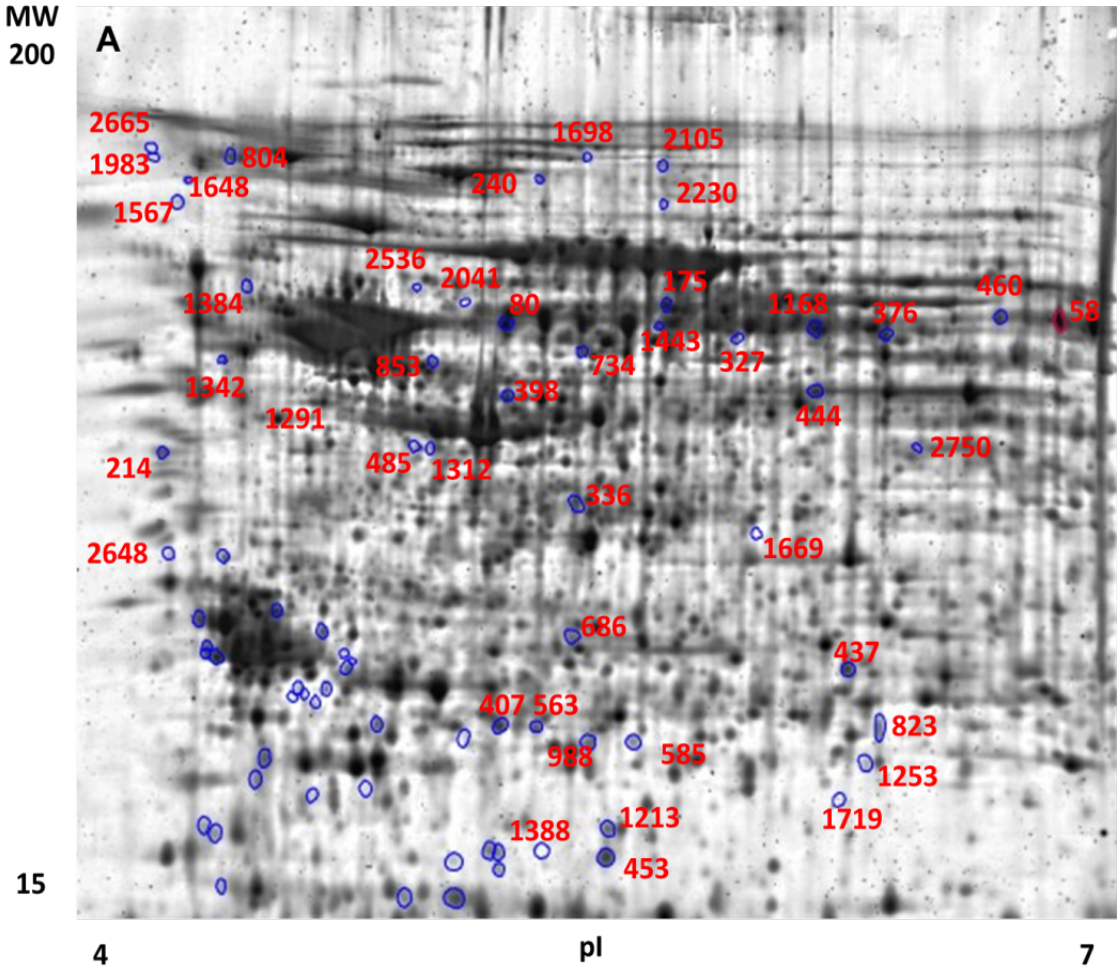

Control
DISC1 RNAi #1
Control
DISC1 RNAi #1
150 –
100 –
75 –
DISC1
50 –
Tubulin

Figure S1


MW
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A
2665
1983
804
1698
2105
1648
240
2230
1567
2536
2041
175
460
1384
80
1168
376
58
1443
853
734
327
1342
398
1291
444
214
485
1312
2750
336
2648
1669
686
437
407
563
823
988
585
1253
1213
1719
1388
453
15
4
pI
7

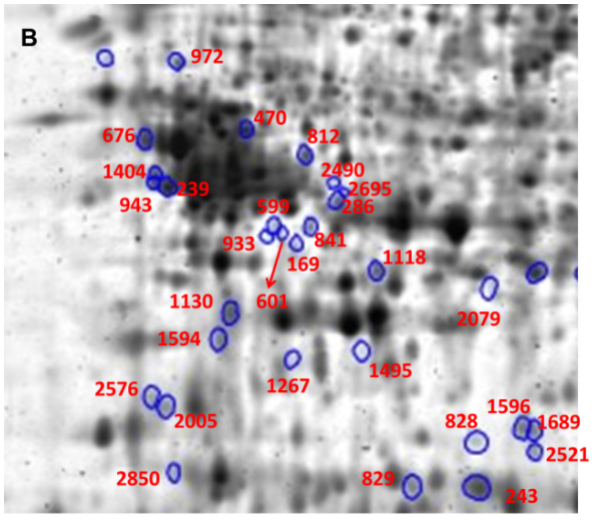
B
972
470
676
812
1404
2490
239
2695
943
599
286
933
841
169
1118
1130
601
2079
1594
1495
1267
2576
1596
2005
828
1689
2521
2850
829
243

Figure S2

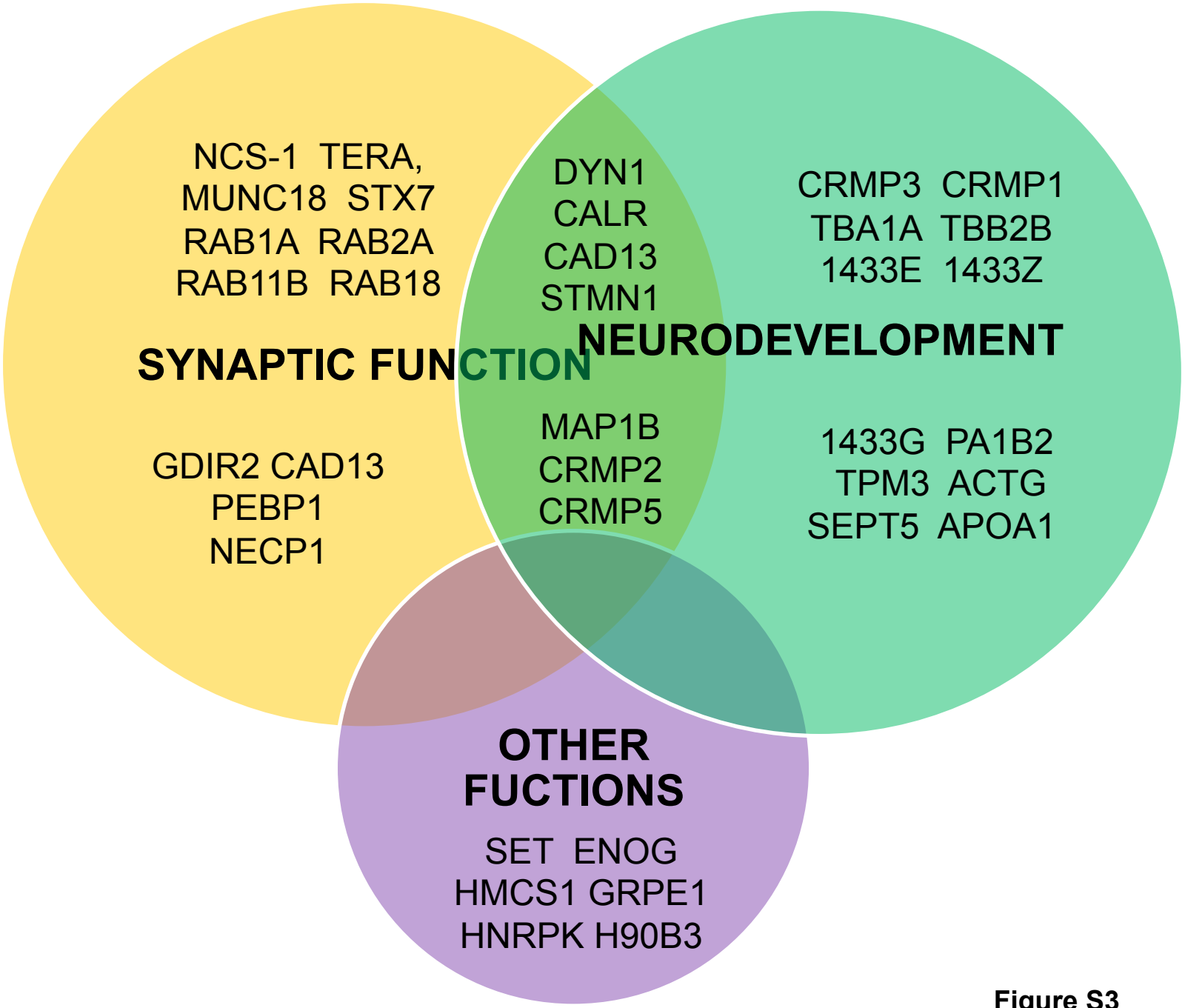
NCS-1 TERA,
MUNC18 STX7
RAB1A RAB2A
RAB11B RAB18
SYNAPTIC FUNCTION
GDIR2 CAD13
PEBP1
NECP1
DYN1
CALR
CAD13
STMN1
MAP1B
CRMP2
CRMP5
CRMP3 CRMP1
TBA1A TBB2B
1433E 1433Z
NEURODEVELOPMENT
1433G PA1B2
TPM3 ACTG
SEPT5 APOA1
OTHER
FUCTIONS
SET ENOG
HMCS1 GRPE1
HNRPK H90B3

Figure S3

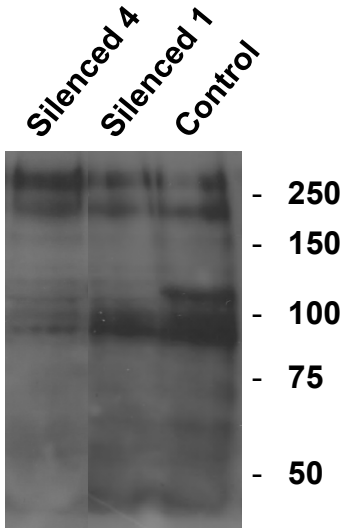

Figure S4