

Supplementary Table 1: Upregulation and downregulation proteins in NCSTN $-/-$ HaCaT cells treated and non-treated with GG.

hgnc_symbol	ID	p-value adjusted	log2 FC
SHC1	P29353	2.00E-07	-3.24
SGTB	Q96EQ0	0.0422	-2.78
MRM1	Q6IN84	0.000189	-2.26
CHTF8	P0CG13	5.77E-09	-2.24
NHERF2	Q15599	5.50E-05	-1.91
FAF2	Q96CS3	1.73E-13	-1.91
COX7A2	P14406	0.0193	-1.82
DOCK7	Q96N67	0.0243	-1.66
TMOD1	P28289	0.0356	-1.4
BOLA3	Q53S33	0.00649	-1.4
CPD	O75976	0.00542	-1.36
LIMD1	Q9UGP4	1.15E-05	-1.3
SUPT7L	O94864	5.77E-05	-1.28
MYL9	P24844	0.00919	-1.25
ADAM10	O14672	1.73E-13	-1.24
BET1	O15155	0.0273	-0.919
GALNT6	Q8NCL4	3.08E-05	-0.912
CLDND1	Q9NY35	0.000593	-0.867
TCF20	Q9UGU0	0.0158	-0.832
CWF19L1	Q69YN2	0.0387	-0.819
KIFC3	Q9BVG8	0.013	-0.761
DLGAP5	Q15398	0.00091	-0.717
RABGGTB	P53611	0.0307	-0.713
IRS2	Q9Y4H2	4.07E-05	-0.689
TRIM24	O15164	0.000468	-0.688
ITGB4	P16144	0.000746	-0.635
OGT	O15294	0.000155	0.597
FBXO2	Q9UK22	4.21E-06	0.644
TMED1	Q13445	0.0383	0.647
FCGBP	Q9Y6R7	0.0395	0.658

GET4	Q7L5D6	0.0201	0.692
TACSTD2	P09758	6.25E-06	0.699
ZC3HC1	Q86WB0	0.0306	0.7
COG6	Q9Y2V7	2.63E-10	0.705
SYMPK	Q92797	7.69E-08	0.715
STARD10	Q9Y365	0.000173	0.809
ANXA9	O76027	7.58E-06	0.811
SQLE	Q14534	1.73E-13	0.856
RNF2	Q99496	9.09E-13	0.906
CCNH	P51946	0.00107	0.941
SHPK	Q9UHH6	2.23E-07	1
GLS	O94925	0.000243	1.03
CMTM6	Q9NX76	0.0154	1.06
SRC	P12931	0.013	1.1
TMEM41A	Q96HV5	0.0264	1.12
POSTN	Q15063	0.0484	1.2
ITGB6	P18564	0.0409	1.21
MADD	Q8WYG6	1.06E-06	1.22
HMG20A	Q9NP66	2.38E-10	1.27
LY75	O60449	2.59E-08	1.3
CCN1	O00622	0.0436	1.35
IBA57	Q5T440	0.000423	1.4
KAT7	O95251	0.0085	1.41
TMEM192	Q8IY95	0.0063	1.46
P3H1	Q32P28	0.00694	1.52
TMEM14C	Q9P0S9	0.043	1.66
LRRC41	Q15345	1.75E-10	1.74
TBP	P20226	5.57E-06	2.58
AP5Z1	O43299	1.73E-13	2.66
C4A	P0C0L4	0.00153	2.83
C4A	P0C0L4	0.00153	2.83
IFI30	P13284	0.00267	3.02
RILPL1	Q5EBL4	1.73E-13	3.09

PPP3CB	P16298	4.47E-11	3.35
RCE1	Q9Y256	1.73E-13	5.26
SLC38A2	Q96QD8	1.73E-13	6.69