

Supplementary information, Table S2 Fold change in invasion relative to control (TP53-Knockdown)

siRNA Target	Field Number										Average
	Replicate 1					Replicate 2					
	1	2	3	4	5	6	7	8	9	10	
GPR112	54.8	51.2	76.2	31.7	69.1	22.7	19.9	16.4	22.9	14.5	37.9
FBXL2	27.3	13.4	29.1	19.4	20.8	42.5	32.5	4.5	46.3	31.6	26.7
ZNF442	14.9	16.2	21.2	13.7	22.1	14.6	12.6	13.1	17.5	11.5	15.8
TGM3	15.3	11.0	19.6	18.2	21.8	9.3	18.9	13.9	13.4	12.6	15.4
GPR158	21.0	19.0	24.6	13.4	16.0	14.7	8.7	16.1	9.0	7.2	15.0
ADAMTS18	6.5	15.2	10.5	13.2	13.8	18.7	7.2	24.3	15.9	14.2	13.9
HUWE1	11.4	10.5	12.6	10.2	3.4	4.1	27.3	4.1	11.2	25.5	12.0
TBX22	8.9	11.8	14.1	10.0	12.9	11.2	15.8	9.5	16.4	8.6	11.9
FN1	16.6	12.5	13.1	18.2	13.8	13.6	8.0	6.3	5.7	7.3	11.5
CD109	19.2	11.9	17.4	14.4	10.3	6.8	8.6	7.5	7.9	4.5	10.9
MAP2K7	20.8	7.3	3.7	14.9	16.9	8.9	5.1	10.2	6.5	7.9	10.2
GALNS	6.7	11.9	12.4	10.5	14.2	3.0	9.1	6.2	6.1	7.0	8.7
NAV3	10.0	10.5	12.7	11.1	8.3	8.2	4.8	8.0	6.4	6.8	8.7
ERGIC3	8.4	7.4	8.1	7.7	7.0	5.8	5.1	10.8	6.7	7.9	7.5
TNN	7.0	6.8	7.8	8.0	10.8	6.7	3.1	6.0	8.6	9.2	7.4
SYT14L	11.6	6.8	6.5	6.5	7.4	3.5	9.7	3.7	9.3	8.0	7.3
GRM1	8.8	9.4	6.9	16.3	10.9	1.6	6.5	2.5	5.1	5.0	7.3
SEMA3D	11.4	7.2	6.7	10.7	7.3	4.4	7.5	9.4	3.7	2.8	7.1
ARHGEF10	10.0	8.6	6.8	6.6	7.0	5.3	6.4	6.4	5.2	5.8	6.8
GJD4	12.2	7.4	5.6	9.5	8.4	4.9	4.7	5.5	5.0	4.1	6.7
GUCY1A2	13.7	6.0	7.9	8.5	9.8	3.9	2.6	4.6	3.1	3.9	6.4
DTNB	3.5	12.4	6.8	2.9	6.5	6.5	6.0	7.3	4.9	7.3	6.4
ERICH1	6.2	8.2	8.8	7.7	6.2	3.7	3.6	6.7	5.8	5.8	6.2
STAB1	5.1	8.6	9.1	7.0	9.7	4.3	3.0	3.5	4.1	2.0	5.6
PRDM9	5.4	3.5	3.7	4.1	3.6	4.6	10.3	5.2	7.5	8.0	5.6
ALK	6.7	7.9	4.2	7.3	5.1	3.6	6.8	4.0	5.2	4.8	5.6
ADARB2	5.1	7.5	4.2	4.2	3.3	7.5	7.3	5.6	3.2	7.0	5.5
RNF219	5.8	6.2	6.8	4.1	11.9	4.5	4.2	4.4	3.5	3.1	5.4
ZMYM4	5.4	6.9	5.6	8.3	4.2	5.5	3.6	4.8	4.5	4.8	5.4
CACNA2D3	5.1	4.4	4.0	3.4	2.9	5.1	8.5	8.1	5.6	5.9	5.3
HIST1H1B	4.6	3.8	4.7	6.2	7.1	4.0	4.4	4.1	5.9	7.9	5.3
C10orf137	8.8	6.8	6.6	3.3	3.2	2.1	6.6	3.4	7.1	2.7	5.1
TLR9	4.7	6.0	5.7	6.4	5.4	2.5	6.6	3.7	2.1	4.6	4.8
SMAD3	3.4	1.0	4.0	2.7	2.6	7.6	3.3	8.1	7.7	2.3	4.3
FBXW7	4.9	2.9	4.2	4.3	4.6	4.1	3.8	5.5	3.6	4.2	4.2
SHANK1	1.5	5.5	4.8	0.6	3.8	0.4	6.5	6.1	9.0	3.8	4.2
EYA4	7.1	3.1	5.7	2.3	5.4	0.7	3.2	3.0	4.5	4.6	4.0
COL3A1	2.5	2.8	3.7	2.8	2.5	6.6	5.7	4.4	4.4	3.8	3.9
SYNE1	9.9	2.2	7.4	3.8	7.5	2.2	1.2	1.7	2.2	1.2	3.9
MMP2	3.0	3.5	2.7	2.9	3.0	3.2	9.5	1.4	3.7	6.4	3.9
ADAMTSL3	3.4	3.6	5.1	3.2	3.0	3.4	5.6	3.0	4.9	3.6	3.9
SMAD2	2.6	4.1	1.8	2.3	2.3	4.6	4.1	4.2	6.9	2.7	3.6
OR51E1	2.8	3.5	3.6	3.4	0.9	8.6	2.5	3.8	2.8	3.3	3.5
EVL	3.6	2.6	5.6	2.6	3.8	4.0	2.6	2.5	2.9	3.4	3.4
OBSCN	3.9	2.8	3.0	3.0	3.4	2.4	1.3	4.5	3.3	5.2	3.3
P2RY14	5.9	1.9	1.3	3.8	2.4	4.7	3.6	1.4	4.8	2.3	3.2
CUX1	4.9	1.9	3.2	6.2	5.2	2.3	1.8	1.4	2.6	1.5	3.1
C15orf2	2.1	2.6	2.6	2.9	4.4	3.7	2.5	4.4	3.1	2.4	3.1
EPHB6	3.2	1.5	2.1	3.8	1.9	2.2	2.7	3.6	3.4	6.0	3.0
RAPGEF4	6.3	1.9	4.8	9.0	1.6	1.2	0.9	2.5	1.2	0.6	3.0
PTPRU	2.9	3.8	3.6	3.0	3.1	2.1	1.8	3.0	2.7	2.5	2.8

UHRF2	1.2	2.7	3.1	1.6	1.6	3.4	2.1	5.5	3.6	3.4	2.8
PTPRD	2.2	3.7	3.1	1.7	2.6	2.9	2.1	2.9	3.6	2.8	2.8
KIAA1409	1.2	4.2	1.5	2.0	1.7	4.9	2.2	2.7	3.3	3.1	2.7
KCNQ5	3.3	2.0	2.5	3.0	3.5	1.2	3.7	2.2	2.9	2.4	2.7
AKAP6	2.2	3.3	2.1	2.3	2.1	2.6	4.1	2.7	2.6	2.7	2.7
TAF2	1.8	3.3	4.4	2.2	1.6	2.7	2.9	3.5	1.2	2.5	2.6
C10orf115	2.7	3.0	1.6	2.5	1.0	3.3	3.2	2.9	2.5	3.4	2.6
NOS3	4.0	2.7	2.9	4.1	4.0	2.3	0.7	1.2	1.2	1.2	2.4
TGFBR2	2.4	3.8	2.3	4.4	1.1	2.5	0.8	3.2	1.6	2.1	2.4
FAM193B	1.8	1.8	1.6	2.6	2.1	2.9	3.5	3.1	2.1	2.2	2.4
SMTN	2.4	3.4	2.8	2.5	1.9	2.3	2.1	1.2	2.7	2.4	2.4
ADAMTS15	5.6	2.9	1.6	3.0	2.5	1.5	0.9	1.1	1.5	2.2	2.3
CLSTN2	1.9	1.0	1.9	1.2	2.3	2.5	4.1	2.6	2.3	3.0	2.3
TIAM1	2.0	2.8	3.4	1.6	2.3	2.1	1.2	2.9	2.1	1.8	2.2
HAPLN1	1.4	2.1	3.8	2.5	1.7	2.8	1.9	2.4	1.2	2.4	2.2
PRKDC	0.9	3.3	4.2	1.0	2.0	2.9	0.6	4.0	2.3	0.7	2.2
ABCB11	2.0	2.4	2.1	0.9	1.6	2.2	2.6	2.4	2.2	3.4	2.2
CNTN4	2.5	2.2	3.3	2.8	2.8	1.6	1.8	1.5	1.1	2.2	2.2
LAMA1	2.7	3.8	3.4	1.5	2.7	2.2	1.1	2.1	1.4	0.7	2.2
ERCC6	0.7	2.1	3.1	2.0	1.6	1.7	2.2	1.8	2.6	3.4	2.1
GLI3	2.7	3.4	2.4	3.9	1.8	1.4	1.6	1.7	0.9	1.4	2.1
BCL9	2.1	3.7	2.5	1.0	1.4	1.1	2.2	1.8	1.5	4.0	2.1
CD248	3.0	3.3	1.7	1.6	2.5	2.0	2.0	1.4	1.4	2.3	2.1
MAPK8IP2	1.3	1.5	3.0	2.0	2.0	1.2	2.5	3.0	1.7	2.8	2.1
CD46	2.1	2.7	3.2	1.5	1.6	0.8	0.6	1.5	1.5	5.2	2.1
CD93	2.3	1.1	1.6	2.3	1.5	1.2	2.5	1.6	3.2	3.2	2.1
IRS4	1.1	1.3	3.2	2.4	5.1	2.3	1.2	0.8	1.0	2.1	2.1
MKRN3	0.6	1.8	1.2	1.0	1.3	4.5	2.3	2.1	3.1	2.5	2.0
TTL3	0.9	1.2	1.3	2.5	3.1	1.4	1.9	2.0	2.9	3.1	2.0
SCN3B	1.8	2.5	4.0	3.1	3.0	1.9	0.4	1.0	1.7	0.8	2.0
CPAMD8	1.1	2.5	1.4	2.2	2.3	2.6	2.1	1.2	1.9	2.3	2.0
P2RX7	4.3	3.5	1.9	1.9	1.5	1.3	1.9	0.6	1.6	0.9	1.9
ARHGFE9	1.2	2.3	2.9	3.2	2.4	0.5	1.3	4.5	0.2	0.8	1.9
ACSL5	1.1	1.4	1.3	1.9	1.6	2.4	1.1	2.0	2.9	3.3	1.9
EPHA3	1.1	1.1	1.1	2.3	0.7	5.2	1.2	1.4	1.6	2.7	1.8
ARHGFE1	0.7	0.4	2.0	0.2	0.4	1.1	2.0	3.8	2.8	4.6	1.8
FAM161A	0.9	1.8	2.0	1.4	1.3	2.3	2.4	0.8	2.2	2.9	1.8
PIK3CA	2.7	2.1	2.5	1.2	1.2	1.6	2.3	1.5	1.5	1.3	1.8
PKNOX1	2.6	1.6	1.2	1.7	0.7	3.4	1.9	1.8	2.0	0.9	1.8
SH3TC1	1.1	2.8	1.8	1.3	2.2	1.5	1.8	1.9	1.9	1.4	1.8
ATP11A	2.2	1.9	1.8	0.1	1.5	2.6	1.6	1.8	1.5	2.2	1.7
TP53	1.2	1.4	1.8	1.9	1.9	1.2	2.2	1.0	2.2	2.0	1.7
GNAS	0.7	0.4	1.5	2.6	1.6	2.5	2.2	2.5	1.1	1.5	1.7
ABCA1	1.1	2.6	1.2	1.9	2.0	0.9	1.4	1.6	1.5	2.3	1.7
MAP2	2.6	1.1	1.2	1.4	2.5	1.4	1.2	2.0	1.2	1.7	1.6
NUP210	1.9	2.0	2.4	1.7	1.8	1.6	1.0	1.3	1.6	1.0	1.6
F8	1.3	1.2	0.4	1.0	0.6	4.0	0.6	4.7	1.5	0.9	1.6
PCDH11X	0.6	2.1	2.2	2.6	1.5	1.6	1.2	1.7	1.3	1.2	1.6
ADAMTS20	0.5	1.2	0.4	0.8	1.2	2.2	3.1	2.6	1.6	1.9	1.5
CSMD3	2.1	1.8	1.9	2.2	2.5	1.9	1.1	0.8	0.5	0.5	1.5
ZNF521	2.1	1.0	2.2	3.7	3.5	0.3	1.6	0.1	0.2	0.5	1.5
RUNX1T1	1.6	1.8	1.6	1.6	1.6	0.8	2.0	1.8	0.3	1.6	1.5
KIAA0556	1.0	1.2	2.0	0.9	1.3	2.8	0.5	1.3	1.6	2.0	1.5
AKAP12	1.7	1.3	2.2	1.4	2.2	0.5	2.0	1.1	0.7	1.5	1.5
SFRS6	1.0	1.6	1.1	1.8	2.0	1.1	0.8	0.8	1.5	2.0	1.4
SLC29A1	1.5	2.2	1.2	1.9	2.2	0.9	0.8	0.5	1.4	0.8	1.3
DSCAML1	1.2	0.4	0.8	2.6	0.7	0.9	1.5	1.6	1.8	1.5	1.3

RET	1.1	3.0	1.2	1.3	2.7	0.9	0.7	0.4	1.1	0.7	1.3
NTNG1	0.6	1.0	1.1	1.6	1.6	0.6	2.2	1.4	1.0	1.6	1.3
SLC44A4	1.8	0.9	0.9	2.0	2.1	1.0	0.5	0.9	1.5	1.0	1.3
TCERG1L	1.1	1.1	1.0	1.6	0.3	1.5	1.2	1.4	1.9	1.1	1.2
DPP10	1.1	1.4	1.2	0.1	1.6	0.8	1.9	1.2	1.1	1.1	1.2
ROBO1	1.1	1.9	1.5	0.9	1.3	1.3	0.7	1.0	1.2	0.7	1.1
MLL3	1.8	1.3	0.9	1.4	1.1	0.8	0.3	1.1	1.2	1.0	1.1
ADAM29	1.4	1.2	1.2	1.1	1.1	0.8	0.6	1.1	1.5	1.0	1.1
MYO18B	1.0	0.4	1.4	1.1	1.3	2.0	1.1	0.8	0.7	0.9	1.1
PTEN	1.3	0.9	1.0	0.6	1.3	1.1	0.9	1.5	0.7	1.2	1.1
SORL1	0.4	2.0	1.1	1.1	1.4	1.0	1.1	0.2	0.6	1.4	1.1
FLNC	1.1	0.9	1.1	1.0	0.6	1.3	0.5	1.4	1.5	1.1	1.0
ACAN	0.6	1.1	1.1	1.0	1.4	0.7	1.1	0.7	0.9	1.9	1.0
KIAA2022	0.5	0.9	0.5	1.1	1.9	0.9	0.6	1.3	0.9	1.6	1.0
Control	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
PAK6	2.1	1.2	1.0	0.9	1.4	1.0	0.2	0.1	0.6	0.8	0.9
APC	1.9	1.1	1.2	1.1	0.5	0.5	1.0	0.5	0.7	0.7	0.9
EXOC4	0.4	1.1	0.6	0.7	0.7	1.3	1.6	0.9	0.7	1.4	0.9
NF1	1.3	1.1	2.2	1.1	0.9	0.6	0.4	0.5	0.4	0.6	0.9
UQCRC2	0.6	0.7	1.0	0.8	1.2	0.6	1.1	0.6	1.2	1.2	0.9
PHIP	1.1	0.9	0.8	2.0	1.2	0.8	0.8	0.6	0.3	0.5	0.9
LRP2	1.4	0.7	0.8	0.7	1.1	1.1	0.6	0.9	0.8	0.5	0.9
GRID1	0.9	1.2	0.7	1.4	0.6	0.7	0.5	0.8	0.8	1.0	0.9
SMAD4	0.3	0.3	1.0	0.8	2.6	0.7	0.4	0.6	0.8	0.9	0.9
CHL1	1.0	0.8	0.8	0.6	0.4	1.1	1.5	0.7	0.7	0.9	0.9
MYO5C	1.3	1.6	0.9	1.0	0.5	0.7	0.6	0.7	0.8	0.4	0.9
KRT73	0.5	1.0	0.7	0.8	0.9	0.6	0.5	1.1	0.6	1.3	0.8
LGR6	1.3	0.4	0.8	0.4	0.7	1.2	0.7	1.0	0.9	0.8	0.8
PRKD1	1.8	1.0	1.1	0.3	1.7	0.2	0.6	0.2	0.8	0.3	0.8
ITGAE	0.5	1.2	1.0	0.9	1.0	0.6	0.9	0.5	0.5	0.6	0.8
ATP13A1	1.5	0.2	0.4	1.2	1.1	0.3	0.5	1.2	0.3	1.2	0.8
MCM3AP	0.7	0.7	0.8	0.5	1.1	1.1	0.7	0.9	0.6	0.7	0.8
MAP1B	1.2	1.0	0.8	0.9	0.8	0.8	0.5	0.5	0.2	0.4	0.7
IGSF22	0.5	0.6	0.6	0.6	0.7	1.1	0.7	0.9	0.3	1.1	0.7
FBN2	0.7	0.9	0.6	0.5	0.6	0.9	0.4	1.2	0.5	0.6	0.7
RASGRF2	0.9	1.0	0.6	0.8	1.2	0.3	0.3	0.7	0.4	0.5	0.7
ATP13A5	0.6	0.5	0.5	0.5	0.6	0.4	0.4	1.5	0.5	1.2	0.7
PLB1	0.5	0.6	0.6	0.7	0.4	0.3	0.7	1.3	0.6	0.5	0.6
KIAA0182	0.5	0.7	0.5	1.0	0.9	0.4	0.5	0.6	0.4	0.4	0.6
LMO7	0.2	0.6	0.4	0.5	0.4	0.6	1.2	0.7	0.6	0.7	0.6
TCF7L2	0.5	1.0	1.5	0.6	0.8	0.4	0.1	0.1	0.1	0.5	0.6
KRAS	0.5	0.5	0.8	0.7	0.7	0.2	0.8	0.3	0.7	0.5	0.6
IGFBP3	0.6	0.3	0.5	0.9	0.9	0.9	0.5	0.2	0.3	0.3	0.5
MYO19	0.3	0.4	0.1	0.4	0.5	0.6	0.5	0.6	0.9	1.0	0.5
LCN9	0.7	0.5	0.5	0.5	0.6	0.5	0.4	0.5	0.4	0.5	0.5
SLC22A15	0.7	0.6	0.2	0.3	0.3	0.8	0.4	0.3	0.4	0.5	0.5
PRUNE2	0.2	0.3	0.1	0.2	0.5	0.3	0.5	0.7	0.5	0.5	0.4
PCDHA9	0.4	0.3	0.4	0.5	0.5	0.2	0.3	0.5	0.2	0.1	0.4
PLCG2	0.1	0.1	0.2	0.1	0.3	0.1	0.4	0.1	0.3	0.4	0.2
UBB	0.0	0.0	0.4	0.1	0.4	0.0	0.2	0.0	0.2	0.2	0.2
PTPRS	0.3	0.0	0.1	0.2	0.1	0.2	0.2	0.0	0.2	0.1	0.1