

Supplemental Table 4. Results of the RRS validation screen to eliminate off-target effects.

4 of 4 siRNAs validated

Gene Symbol	GENEID
BEND3	57673
CHEK1	1111
CLSPN	63967
CPSF2	53981
ERH	2079
GLRX3	10539
ISCU	23479
PAMR1	25891
PAQR7	164091
PCNA	5111
POLD1	5424
RAD17	5884
RAD9A	5883
RBX1	9978
RNF208	727800
RPA1	6117
RPA2	6118
SKA1	220134
SLC30A8	169026
SLC35G5	83650
SPINK8	646424
SRSF1	6426
TIMELESS	8914
TRIM43B	653192
TRPV4	59341
VPS8	23355
ZBTB8OS	339487
ZNF324	25799

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Gene Symbol	GENEID
ABCC5	10057
AKR1C1	1645
ALPP	250
ANKMY2	57037
ARID1B	57492
C14orf80	283643
C16orf73	254528
C2orf69	205327
CACNG6	59285
CATSPER1	117144
CDH26	60437
CEP19	84984
DNAJB13	374407
EFEMP2	30008
ENPP7	339221
EXOSC4	54512
FAHD2B	151313
FAM27L	284123
FDFT1	2222
FXN	2395
FZD4	8322
GLI3	2737
GPC3	2719
HNRNPC	3183
HSPA6	3310
IGSF11	152404
IRX6	79190
KCNA4	3739
KLHL2	11275
MAFG	4097
MOB1A	55233
NDUFA6	4700
NEDD8	4738
NFYB	4801
NME9	347736
OAT	4942
OGFR	11054
POLA1	5422
POLD3	10714
RAP1GAP	5909
RFC3	5983
RFC4	5984
RNF186	54546
SENP1	29843
SEZ6	124925
SLURP1	57152
SS18L2	51188
SUN5	140732
TCTE1	202500
TIMM22	29928
UBE2M	9040
UBE2V2	7336
UHRF1	29128
WDR33	55339
XKR7	343702
ZDHHC9	51114
ZNF678	339500

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Gene Symbol	GENEID
ACSM2B	348158
AHCY	191
AIRE	326
ANO9	338440
ANXA4	307
APCDD1	147495
AQP6	363
ARL5A	26225
ATF6B	1388
BOK	666
C12orf54	121273
C16orf57	79650
C20orf152	140894
C22orf15	150248
CARD17	440068
CDYL	9425
CHERP	10523
CLEC4M	10332
CLIC3	9022
CNTF	1270
CRYAA	1409
DDX1	1653
DHCR7	1717
DNAJB1	3337
DTX3	196403
ECM1	1893
EED	8726
ERC2	26059
FNDC7	163479
FOXD4L1	200350
FRRS1L	23732
GALNT2	2590
GLRX	2745
GNAT1	2779
GPC6	10082
GPR3	2827
GSK3B	2932
HEPH	9843
HIF1AN	55662
HLA-DRB5	3127
HMGCS2	3158
HPX	3263
HTR2A	3356
IL17RA	23765
IL22RA1	58985
INS-IGF2	723961
IQCA1	79781
KIAA0317	9870
KLHL30	377007
KRT31	3881
LAMA1	284217
LIN28A	79727
LMNB1	4001
LPP	4026
LRRC8D	55144
MANF	7873
MAP2K6	5608
MDK	4192
MEGF6	1953
MGST3	4259
MLANA	2315
MUC7	4589
MZB1	51237
NACA2	342538
NCBP1	4686
NFRKB	4798

NOS2	4843
OBP2A	29991
OR2F2	135948
OR2J2	26707
OR2T5	401993
OR52E2	119678
OR6C68	403284
PATE3	100169851
PEX6	5190
PHF3	23469
PHOSPHO1	162466
PLA2R1	22925
PLEKHH1	57475
PPP2R5B	5526
PRPSAP2	5636
R3HDM2	22864
RAB4B	53916
RAP1A	5906
RAP2C	57826
RASSF10	644943
RASSF7	8045
RBM10	8241
RFC1	5981
RNASEH2C	84153
RNF111	54778
RNF26	79102
RNF39	80352
RNFT1	51136
RSU1	6251
SEC11B	157708
SETD7	80854
SETDB1	9869
SFRS17A	8227
SIRT2	22933
SLC35E2	9906
SNTB2	6645
SPRR1A	6698
STK16	8576
STK36	27148
SYCE1L	100130958
SYCP2	10388
SYDE1	85360
SYNPO	11346
TANK	10010
TAS2R19	259294
TBC1D21	161514
TBX2	6909
TEAD1	7003
TIMP3	7078
TIPIN	54962
TNPO1	3842
TRAF7	84231
UBL3	5412
VPS36	51028
VSX2	338917
ZBTB43	23099
ZFP3	124961
ZNF181	339318
ZNF367	195828
ZNF709	163051