

Additional File 2: Design of the siRNA library

Name	RefSeq ID	siRNA ID or sense siRNA
BAP1	NM_004656	SASI_Hs01_00105395 SASI_Hs01_00105396
UCH-L1	NM_004181	SASI_Hs01_00178415 SASI_Hs01_00178416
UCH-L3	NM_006002	SASI_Hs01_00200423 SASI_Hs01_00200424
UCH-L5, UCH37	NM_015984	SASI_Hs01_00142742 SASI_Hs01_00142743
USP1	NM_001017415	SASI_Hs01_00157121 SASI_Hs01_00157122
USP2	NM_171997	SASI_Hs01_00174976 SASI_Hs02_00367754
USP3	NM_006537	SASI_Hs01_00023593 SASI_Hs01_00023595
USP4, UNPH	NM_199443	SASI_Hs01_00028215 SASI_Hs01_00028216
USP5	NM_003481	SASI_Hs01_00184929 SASI_Hs01_00184930
USP6, TRE-2, TRE17	NM_004505	SASI_Hs02_00337765 SASI_Hs02_00337766
USP7, HAUSP	NM_003470	SASI_Hs01_00079539 SASI_Hs01_00079540
USP8, UBPY	NM_005154	SASI_Hs02_00339089 SASI_Hs01_00136039
USP9X, FAF-X	NM_001039590	SASI_Hs01_00031439 SASI_Hs02_00308597
USP9Y, FAF-Y	NM_004654	SASI_Hs01_00081909 SASI_Hs02_00338066
USP10	NM_005153	SASI_Hs01_00213007 SASI_Hs01_00213008
USP11	NM_004651	SASI_Hs01_00148685 SASI_Hs01_00148686
USP12, UBH1	NM_182488	SASI_Hs01_00167303 SASI_Hs01_00167305
USP13, ISOT-3	NM_003940	SASI_Hs01_00108438 SASI_Hs01_00108439
USP14, ISOT	NM_005151	SASI_Hs01_00016087 SASI_Hs01_00016089
USP15	NM_006313	SASI_Hs01_00059894 SASI_Hs01_00059895
USP16, UBPM	NM_001001992	SASI_Hs01_00121496 SASI_Hs02_00341586
USP17L3	XM_001720764 1 s	CACGUUAACUUUACACACUdTdT CUAUCAUUGCGGUCUUUGUdTdT GCAAUAUCCUGAGUGCCUUdTdT GUUGUCACGACGGACAUAUdTdT GCAACAAACUUGCCAAGAAAdTdT GGAAGAUGUCCAUGAAUUUdTdT GACAUUACUUCUCUUAUGUdTdT CUCAAGAAGGCCAGUGGUAdTdT CACCUUAGACCACUGGAAAdTdT GAGAUUCUCCGAUGUCGCAdTdT
USP18, UBP43	NM_017414	SASI_Hs01_00221412

		SASI_Hs01_00221413
USP19	NM_006677	SASI_Hs01_00130241 SASI_Hs01_00130242
USP20, VDU1	NM_001008563	SASI_Hs01_00099343 SASI_Hs01_00099344
USP21, USP23	NM_001014443	SASI_Hs01_00177787 SASI_Hs01_00177788
USP22	XM_042698	SASI_Hs01_00276309 SASI_Hs01_00276310
USP24	XM_934749	SASI_Hs01_00301651 SASI_Hs01_00301652
USP25	NM_013396	SASI_Hs02_00344762 SASI_Hs01_00191397
USP26	NM_031907	SASI_Hs01_00043149 SASI_Hs01_00043150
USP28	NM_020886	SASI_Hs01_00077918 SASI_Hs01_00077919
USP29	NM_020903	SASI_Hs01_00032719 SASI_Hs01_00032720
USP30	NM_032663	SASI_Hs01_00155679 SASI_Hs01_00155680
USP31	NM_020718	SASI_Hs01_00020641 SASI_Hs01_00020642
USP32	NM_032582	SASI_Hs01_00086230 SASI_Hs01_00086231
USP33, VDU2	NM_201626	SASI_Hs01_00142382 SASI_Hs01_00142383
USP34	NM_014709	SASI_Hs01_00089169 SASI_Hs02_00346129
USP35	XM_935137	SASI_Hs01_00291572 SASI_Hs01_00291573
USP36	NM_025090	SASI_Hs02_00357787 SASI_Hs01_00194136
USP37	NM_020935	SASI_Hs01_00018875 SASI_Hs02_00354323
USP38	NM_032557	SASI_Hs01_00189218 SASI_Hs02_00360065
USP39, SAD1	NM_006590	SASI_Hs01_00034674 SASI_Hs01_00034675
USP40	NM_018218	SASI_Hs01_00145783 SASI_Hs02_00351527
USP41	XM_036729	SASI_Hs02_00482814 SASI_Hs02_00482815
USP42	XM_932196	SASI_Hs01_00248233 SASI_Hs01_00248234
USP43	XM_934221	SASI_Hs01_00274671 SASI_Hs01_00274672
USP44	NM_032147	SASI_Hs02_00359381 SASI_Hs01_00075742
USP45	XM_931124	SASI_Hs01_00265784 SASI_Hs01_00265785
USP46	NM_022832	SASI_Hs01_00080807 SASI_Hs01_00080808
USP47	NM_017944	SASI_Hs01_00112225 SASI_Hs01_00112227
USP48	NM_032236	SASI_Hs01_00077498 SASI_Hs01_00077499
USP49	NM_018561	SASI_Hs01_00055585

		SASI_Hs02_00352112
USP50	NM_203494	SASI_Hs02_00373416 SASI_Hs02_00373417
USP51	NM_201286	SASI_Hs02_00372924 SASI_Hs02_00372925
USP52	NM_014871	SASI_Hs01_00133440 SASI_Hs01_00133442
USP54	NM_152586	SASI_Hs02_00366408 SASI_Hs02_00366409
USPL1	NM_005800	SASI_Hs02_00340306 SASI_Hs01_00128479
CYLD	NM_015247	SASI_Hs01_00177192 SASI_Hs01_00177191
DUB-3	NM_201402	SASI_Hs02_00372940 SASI_Hs02_00372941
Ataxin-3	NM_030660	SASI_Hs02_00358236 SASI_Hs02_00358237
Ataxin-3-like	XM_045705	SASI_Hs01_00259290 SASI_Hs01_00259291
Josephin-1	NM_014876	SASI_Hs02_00346483 SASI_Hs01_00072064
Josephin-2	NM_138334	SASI_Hs01_00128488 SASI_Hs01_00128489
TAF1D	NM_024116	SASI_Hs01_00119698 SASI_Hs01_00119700
TNFAIP3, A20	NM_006290	SASI_Hs01_00033556 SASI_Hs01_00033557
ZA20D1, Cezanne-1	NM_020205	SASI_Hs01_00089029 SASI_Hs01_00089030
OTUD7i, Cezanne-2	NM_130901	SASI_Hs01_00055782 SASI_Hs01_00055783
OTUD4, HIN-1	NM_017493	SASI_Hs02_00372731 SASI_Hs02_00372732
OTUD6A, HIN-6	NM_207320	SASI_Hs01_00018704 SASI_Hs01_00018705
OTUD2, YOD1	NM_018566	SASI_Hs01_00052848 SASI_Hs01_00052849
OTUD6B	NM_016023	SASI_Hs01_00222466 SASI_Hs02_00348712
OTUD5	NM_017602	SASI_Hs01_00052828 SASI_Hs01_00052829
OTUB1, Otubain-1	NM_017670	SASI_Hs02_00378146 SASI_Hs02_00378147
OTUB2, Otubain-2	NM_023112	SASI_Hs01_00010701 SASI_Hs01_00010702
OTUD1	XR_040065	SASI_Hs02_00515603 SASI_Hs02_00515604
ZRANB1, TRABID	NM_017580	SASI_Hs01_00155779 SASI_Hs02_00350242
VCPIP1, VCIP135	NM_025054	SASI_Hs02_00357704 SASI_Hs01_00165636
STAMPB, AMSH	NM_006463	SASI_Hs01_00051759 SASI_Hs01_00051760
STAMBPL1, AMSH-like	NM_020799	SASI_Hs01_00241436 SASI_Hs01_00241437
BRCC3i, BRCC36, BRCC3	NM_001018055	SASI_Hs02_00356685 SASI_Hs01_00193368
COPS5, CSN5, JAB1, SGN5	NM_006837	SASI_Hs02_00342404

		SASI_Hs01_00209042
COPS6, CSN6, SGN6	NM_006833	SASI_Hs02_00342398 SASI_Hs01_00117938
EIF3S3, eIF-3-gamma	NM_003756	SASI_Hs01_00072290 SASI_Hs01_00072291
EIF3S5, eIF-epsilon	NM_003754	SASI_Hs01_00246686 SASI_Hs02_00336223
MYSM1	XM_055481	SASI_Hs01_00255872 SASI_Hs01_00255873
MPND	NM_032868	SASI_Hs01_00162447 SASI_Hs01_00162448
PSMD14, POH1, RPN11	NM_005805	SASI_Hs02_00340316 SASI_Hs01_00024446
PRPF8, PRP8	NM_006445	SASI_Hs01_00015918 SASI_Hs01_00015919
PSMD7, RPN8	NM_002811	SASI_Hs02_00334491 SASI_Hs02_00334492
USP17L5	XM_001130437	SASI_Hs02_00387302 SASI_Hs02_00387303
USP17L1P	XR_040280	SASI_Hs02_00517496 SASI_Hs02_00517497
IFP38	NG_005632 s	CCGAUGACUUUGAGACCAUdTdT
USP17L3	XM_001720764	CACGUUAACUUUACACACUdTdT CUAUCAUUGCGGUCUUUGUdTdT GCAAUAUCCUGAGUGCCUdTdT GUUGUCACGACGGACAUAUdTdT GCAACAAACUUGCCAAGAAdTdT GGAAGAUGUCCAUGAAUUUdTdT GACAUUACUUCUCUUAUGUdTdT CUCAAGAAGGCCAGUGGUAdTdT CACCUUAGACCACUGGAAAdTdT GAGAUUCUCCGAUGUCGCAdTdT
USP17L4	XM_001720370	CACGUUAACUUUACACACUdTdT CUAUCAUUGCGGUCUUUGUdTdT GCAAUAUCCUGAGUGCCUdTdT GUUGUCACGACGGAUUAUdTdT GCAACAAACUUGCCAAGAAdTdT CACCUUAGACCACUGGAAAdTdT GGAAGAUGUCCAUGAAUUUdTdT CUCAAGAAGGCCAGUGGUAdTdT GAGAUUCUCCGAUGUCGCAdTdT CGGAUUAUACUUCUCUUAUdTdT
USP17L6	NR_027279	CUGGACAUCGCCUGGAUAdTdT CCAAGGUCCUCAUCCUUGUdTdT GAGAUUCUCCGAUGUCACAdTdT GCCUAUCAUUGUGGUGUUUdTdT GCUUCCUUGCAGUGCCUGAdTdT GGAAGAUGCCCAUGAAUUUdTdT
USP17L7	XM_001723172	GAGAUUCUCCGAUGUCACAdTdT GCGUAUUGGAGAUCUCAAAdTdT CACCUUAGACCACUGGAAAdTdT CUCUCAACGUGUCAUCUdTdT CUCAUUCUUGUAUUGAAGAdTdT CCAAAGAACUCAUUGGAGAdTdT GACGUUAACUUUACCCACUdTdT CAUGAAUUUCUCAUGUUUAdTdT CAUGUUCUGUACUAUGCAAdTdT CUCAAGAAGGCCAGUGGUAdTdT

USP17L8	XM_001720762	GAGAUUCUGCGAUGUCACAdTdT GUUGUCACAACGGAUUUAdTdT CUAUCCUUGCGGUCUUUGUdTdT
DUSP19	AB038770	GAAUUUAUUGAAGAAGCAAdTdT GUUGCAUAUGGAGUUGAAAdTdT CCAACAUCCUGUCUUUUUdTdT GACUUUACAUAUAAGAGCAAdTdT GCUUCCUCAGUGACUUUAdTdT GACUCAUAUUCUUAUGUUdTdT