

Supplementary Table S9. List of the 13 essential gene candidates with p-value of < 0.05 for average shRNA hairpin activity differential

Gene symbol	RefSeq ID	TRC Clone ID	Validated clone	NUCL	Active duplex	H score	p-value
C8G	NM_000606	TRCN0000057148		2,437	Yes	57	1.10E-03
		TRCN0000057151		3,036	Yes		
		TRCN0000057150		3,245	Yes		
		TRCN0000057152		3,395	Yes		
		TRCN0000057149		5,467			
		TRCN0000174205		5,596			
CDK10	NM_003674	TRCN0000000689	Yes	2,375	Yes	40	9.20E-04
		TRCN0000001820		2,559	Yes		
		TRCN0000199963	Yes	3,322	Yes		
		TRCN0000001822	Yes	3,333	Yes		
		TRCN0000199577	Yes	3,684	Yes		
		TRCN0000001821	Yes	3,808	Yes		
		TRCN0000199232	Yes	4,052			
		TRCN0000001823		4,188			
		TRCN0000199908		4,228			
		TRCN0000000687	Yes	4,338			
		TRCN0000199289	Yes	4,443			
		TRCN0000000686		4,475			
		TRCN0000000685		4,580			
		TRCN0000000688		4,957			
TRCN0000010653		6,055					
CSNK1E	NM_152221	TRCN0000001837	Yes	1,841	Yes	32	4.00E-04
		TRCN0000009956		2,032	Yes		
		TRCN0000009965	Yes	2,361	Yes		
		TRCN0000001834	Yes	2,987	Yes		
		TRCN0000001838	Yes	3,905	Yes		
		TRCN0000000603	Yes	3,981	Yes		
		TRCN0000196744	Yes	4,125			
		TRCN0000199466	Yes	4,138			
		TRCN0000001836	Yes	4,377			
		TRCN0000000604	Yes	4,404			
		TRCN0000001835	Yes	4,429			
		TRCN0000196988		4,551			
		TRCN0000009955	Yes	5,153			
		TRCN0000199668	Yes	5,277			
		TRCN0000000602	Yes	5,316			
		TRCN0000009957	Yes	5,876			
		TRCN0000195482	Yes	6,552			
		TRCN0000009966		6,578			
TRCN0000000605		7,044					
FMO2	NM_001460	TRCN0000064474		1,893	Yes	50	3.60E-06
		TRCN0000064477		2,030	Yes		
		TRCN0000064473		2,041	Yes		
		TRCN0000064476		2,131	Yes		
		TRCN0000064475		2,721	Yes		
		TRCN0000159390		4,623			
		TRCN0000158489		4,718			
		TRCN0000158985		4,914			
		TRCN0000160288		5,014			
TRCN0000160203		5,066					
HDAC1	NM_004964	TRCN0000004815		2,430	Yes	40	2.60E-04
		TRCN0000195467	Yes	2,473	Yes		
		TRCN0000197198	Yes	3,060	Yes		
		TRCN0000004814	Yes	3,384	Yes		
		TRCN0000195672	Yes	4,494			
		TRCN0000004817	Yes	5,133			
		TRCN0000195103	Yes	5,233			
TRCN0000004816	Yes	5,340					

		TRCN0000196998	Yes	5,782			
		TRCN0000004818	Yes	7,149			
HRAS	NM_005343	TRCN0000033267		2,202	Yes	38	1.80E-04
		TRCN0000033268		2,502	Yes		
		TRCN0000033265	Yes	2,690	Yes		
		TRCN0000018336		3,597	Yes		
		TRCN0000033266		3,691	Yes		
		TRCN0000040090		4,570			
		TRCN0000040091	Yes	4,709			
		TRCN0000010357	Yes	4,976			
		TRCN0000040089	Yes	5,262			
		TRCN0000010358	Yes	5,353			
		TRCN0000040088	Yes	5,401			
		TRCN0000040092	Yes	5,895			
TRCN0000033264	Yes	7,715					
IGF2	NM_000612	TRCN0000062431		1,171	Yes	44	1.70E-06
		TRCN0000062430		1,443	Yes		
		TRCN0000062429		1,863	Yes		
		TRCN0000062432		2,067	Yes		
		TRCN0000139636		5,771			
		TRCN0000140979		6,418			
		TRCN0000144248		6,461			
		TRCN0000140389		6,673			
TRCN0000141911		7,449					
KRAS	NM_033360	TRCN0000033261	Yes	2,331	Yes	45	2.60E-04
		TRCN0000033263		2,637	Yes		
		TRCN0000040152	Yes	2,650	Yes		
		TRCN0000040149	Yes	2,962	Yes		
		TRCN0000040151		3,843	Yes		
		TRCN0000033260	Yes	5,095			
		TRCN0000033259	Yes	5,128			
		TRCN0000040148	Yes	5,346			
		TRCN0000010369	Yes	6,250			
TRCN0000033262	Yes	7,403					
TRCN0000018337		7,471					
LCK	NM_005356	TRCN0000001601		2,238	Yes	44	1.10E-02
		TRCN0000001598	Yes	2,641	Yes		
		TRCN0000010178		2,801	Yes		
		TRCN0000055434		3,540	Yes		
		TRCN0000010175		4,261			
		TRCN0000001600		4,283			
		TRCN0000010176		4,353			
		TRCN0000010177		4,459			
TRCN0000001599		4,485					
MAPK15	NM_139021	TRCN0000038660		2,391	Yes	46	4.60E-04
		TRCN0000038663		2,413	Yes		
		TRCN0000199135	Yes	2,795	Yes		
		TRCN0000199134		3,280	Yes		
		TRCN0000199957		3,790	Yes		
		TRCN0000002214		3,797	Yes		
		TRCN0000002213		4,120			
		TRCN0000002212		4,326			
		TRCN0000038662	Yes	4,699			
		TRCN0000199687	Yes	4,711			
		TRCN0000199159		4,874			
		TRCN0000038659		5,503			
TRCN0000038661		6,162					
		TRCN0000006248	Yes	2,337	Yes		
		TRCN0000121325	Yes	3,107	Yes		
		TRCN0000199639	Yes	3,739	Yes		
		TRCN0000199631	Yes	3,985	Yes		
		TRCN0000121222	Yes	4,036			

PLK1	NM_005030	TRCN0000196379	Yes	4,341		17	1.00E-03
		TRCN0000199471		4,351			
		TRCN0000121323	Yes	4,596			
		TRCN0000006247	Yes	4,598			
		TRCN0000121324	Yes	4,662			
		TRCN0000006246	Yes	4,926			
		TRCN0000121073	Yes	5,039			
		TRCN0000199290	Yes	5,069			
		TRCN0000006249		5,157			
		TRCN0000121074		5,265			
		TRCN0000011006	Yes	5,270			
		TRCN0000121224	Yes	5,414			
		TRCN0000121322	Yes	5,714			
		TRCN0000121223	Yes	6,470			
		TRCN0000121075	Yes	6,684			
		TRCN0000121226	Yes	6,901			
		TRCN0000121326	Yes	7,059			
		TRCN0000121072	Yes	8,835			
		POLA1	NM_016937	TRCN0000052957	Yes		
TRCN0000174228				2,378	Yes		
TRCN0000052954	Yes			3,161	Yes		
TRCN0000174164				3,595	Yes		
TRCN0000052956	Yes			5,921			
TRCN0000052953	Yes			5,956			
TRCN0000052955	Yes	7,228					
TRIB3	NM_021158	TRCN0000037406		2,418	Yes	50	1.20E-03
		TRCN0000037407		3,060	Yes		
		TRCN0000199844	Yes	3,317	Yes		
		TRCN0000199684	Yes	3,616	Yes		
		TRCN0000197212	Yes	3,634	Yes		
		TRCN0000037405		4,250			
		TRCN0000196756	Yes	4,298			
		TRCN0000037404	Yes	4,400			
		TRCN0000199148	Yes	5,031			
TRCN0000037408	Yes	5,052					