**Table S3 – Genes Targeted in sgRNA minilibrary**

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| --- | --- | --- | --- | --- | --- | --- |
| **KRAS Lethal Candidates** | | | | **KRAS enhancing Candidates** | | **Essential** |
| RPS23 | MAPK1 | AMER1 | GNPDA1 | UBE2F | TTC28 | RPS18 |
| GPATCH8 | ANKRD33 | AGTR1 | NCR3LG1 | LNX2 | ROCK1 | EIF3D |
| LENG9 | CASK | CHPF | HOXA9 | hsa-mir-23c | hsa-mir-494 | RPS15A |
| NGFR | SLC5A9 | PARK7 | hsa-mir-6765 | HEXDC | DEFB1 | COPB2 |
| SLC44A1 | PBK | CORO1B | VSIG8 | ZNF485 | GPD2 | ACTL6A |
| hsa-mir-3656 | SULT1C3 | HERC5 | ZBTB39 | KIF2B | PLP2 | RPL3 |
| CSNK1E | AQP8 | TNFRSF1A | USP6 | SAMD4A | NAT8B | RPP38 |
| FEV | GSG1L | SRM | NIPA2 | OLR1 | FAM151A | IMP4 |
| PROB1 | IL1RL2 | hsa-mir-6847 | MPP6 | RALGAPB | PDE8A | POLR2D |
| SLC7A2 | GSDMA | RAB3GAP2 | HBE1 | REN | PXMP2 | RPL13 |
| GFPT1 | CDX1 | CDKL3 | LAIR1 | hsa-mir-488 | hsa-mir-6868 | RPA1 |
| hsa-mir-200c | PPP1R9A | CHTF8 | HSDL1 | FRMD1 | SLC38A10 | RBM14 |
| COX7A1 | hsa-mir-206 | CXCR6 | GRIPAP1 | NF2 | OR6T1 | RPL19 |
| HSD17B14 | PACSIN3 | GUCY1B3 | OR2AK2 | PIH1D1 | KCTD7 | CPSF2 |
| DOK4 | ATG4C | ERVW-1 | C1orf64 | DIS3L2 | SLX4IP | RPL11 |
| GPBP1L1 | CXCR4 | CDH15 | IMPG1 | TRAF3 | hsa-mir-6889 | SFPQ |
| UGT3A2 | TEX2 | PAX2 | SLC5A5 | IL2RA | OR6C2 | SF3B2 |
| DEXI | NUTM2A | C1orf106 | HHIPL1 | ITPR3 | OR1N2 | CHD4 |
| SPATA31C1 | OR2B6 | NKD2 | MATN2 | INSL5 | SCARA3 | U2AF2 |
| PRH1 | SMCP | GPR50 | CLCNKA | EIF4E2 | IL4I1 | PSMA3 |
| CPNE4 | KCNK15 | GLRA3 | GIMAP7 | MYOT | hsa-mir-3170 | DARS |
| AFAP1L2 | hsa-mir-4302 | PLCXD3 | RAB15 | hsa-mir-3123 | OR5M1 | RPS5 |
| SLC25A27 | NAT8 | PLD6 | ARID4A | GSTA3 | SPO11 | SNRPC |
| APOM | PTBP1 | ASNSD1 | CHST5 | FEZ1 | SULT2B1 | POP5 |
| hsa-mir-3135a | RRNAD1 | SEC61G | hsa-mir-132 | TMLHE | APMAP | KRAS |
| C1orf53 | SLC4A11 | hsa-mir-3188 | SPDYC | TRIM10 | OR5P3 |  |
| IRF9 | FBXO32 | hsa-mir-151b | MTMR4 | RAB2B | GPR84 |  |
| FAM203A | HDAC11 | RBP5 | ASGR2 | ZNF727 | PCDP1 |  |
| CORO7 | HNRNPD | hsa-mir-23a | ICAM5 | PATE3 | ELAVL1 |  |
| NAB1 | POC1A | OR8G2 | hsa-mir-3165 | SOX4 | UHRF1BP1L |  |
| LPCAT1 | hsa-mir-5195 | KCNN1 | FRRS1 | hsa-mir-16-1 | SCUBE2 |  |
| NODAL | ZNF772 | MMP23B | SYDE1 | NECAP1 | KLHL33 |  |
| NCOA5 | C11orf80 | PTCH1 | hsa-mir-4663 | FOXC1 | BAZ1A |  |
| SCML4 | CS | PDAP1 |  | OR5B12 | UST |  |
| EBI3 | LMBRD1 | DRAXIN |  | HIST1H3B | SUCNR1 |  |
| FTH1P18 | RAB31 | DEPTOR |  | ATP6V1E2 | SMPDL3B |  |
| HAX1 | GLTPD2 | hsa-mir-4540 |  | HCAR1 | INO80C |  |
| SUPT3H | HOXB6 | IGSF11 |  | CTNNB1 |  |  |
| WNT2 | SLC44A5 | WFDC2 |  | PYDC1 |  |  |