**Supplemental Table 2. All hits from the shRNA library screen.**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Rank** | **Gene Symbol** | **Median Fold Depletion** |  | **Rank** | **Gene Symbol** | **Median Fold Depletion** |
| 1 | PSMB2 | 59 |  | 37 | ACOX1 | 24 |
| 2 | RAN | 50 |  | 38 | NCL | 23 |
| 3 | SHFM1 | 45 |  | 39 | EEF2 | 23 |
| 4 | IL28B | 43 |  | 40 | EIF2S2 | 22 |
| 5 | PSMD13 | 41 |  | 41 | RPL8 | 21 |
| 6 | POLR2F | 40 |  | 42 | CCNC | 21 |
| 7 | RPL11 | 40 |  | 43 | CYP11B1 | 20 |
| 8 | PSMD2 | 38 |  | 44 | KCNH7 | 19 |
| 9 | SSRP1 | 36 |  | 45 | VCAM1 | 19 |
| 10 | RPL12 | 36 |  | 46 | HSP90AA1 | 19 |
| 11 | HMGCR | 35 |  | 47 | KRT8 | 19 |
| 12 | RPL6 | 34 |  | 48 | NEDD8 | 19 |
| 13 | HNRNPC | 34 |  | 49 | MEN1 | 19 |
| 14 | ITK | 33 |  | 50 | CTNND1 | 18 |
| 15 | SIN3A | 33 |  | 51 | GNB2L1 | 18 |
| 16 | RANBP2 | 33 |  | 52 | CDKN2A | 18 |
| 17 | PSMA3 | 33 |  | 53 | MCM2 | 18 |
| 18 | PSMB7 | 33 |  | 54 | CCNG1 | 17 |
| 19 | LOC402057 | 32 |  | 55 | B4GALT1 | 17 |
| 20 | PSMB3 | 32 |  | 56 | RPL4 | 17 |
| 21 | WNT8A | 32 |  | 57 | PHB2 | 17 |
| 22 | PRMT5 | 32 |  | 58 | SRC | 16 |
| 23 | HRK | 31 |  | 59 | RRM1 | 16 |
| 24 | RPS13 | 31 |  | 60 | RPS3A | 16 |
| 25 | RUVBL2 | 30 |  | 61 | STX16 | 16 |
| 26 | PSMD3 | 30 |  | 62 | UGT1A7 | 15 |
| 27 | ACOX3 | 30 |  | 63 | POLR2J | 14 |
| 28 | PSMA2 | 30 |  | 64 | PTGDS | 13 |
| 29 | RUVBL1 | 28 |  | 65 | PLAT | 13 |
| 30 | RTF1 | 28 |  | 66 | PRPF40A | 13 |
| 31 | SMN1 | 28 |  | 67 | PAFAH1B1 | 13 |
| 32 | ASCC3L1 | 27 |  | 68 | PORCN | 12 |
| 33 | PSMD1 | 27 |  | 69 | ALKBH3 | 12 |
| 34 | HSPE1 | 26 |  | 70 | RTN4 | 12 |
| 35 | WBSCR22 | 25 |  | 71 | NDE1 | 12 |
| 36 | MPL | 25 |  | 72 | KARS | 11 |