

| Name | Sequence | Purpose |
|----------------------|-------------------------|-----------------|
| TRCN0000016276 | GCAGAGGATCCAGGTGTGATA | shRNA KLF1 |
| TRCN0000033449 | CGCACAGAACACTCATGGATT | shRNA BCL11A |
| TRCN0000074225 | GAGTGGAAAGATCATTTATGTT | shRNA ASF1B #22 |
| TRCN0000074226 | CCCACTCAACTGCACTCCTAT | shRNA ASF1B #23 |
| TRCN0000074227 | AGTGGGCTACTACGTCAACAA | shRNA ASF1B #24 |
| Hs ASF1B Forward | GGTTCGAGATCAGCTTCGAG | qRT-PCR |
| Hs ASF1B Reverse | ACCAGCACCGAGTCTAGGAT | qRT-PCR |
| Hs BCL11A Forward | GCCCCAAACAGGAACACATA | qRT-PCR |
| Hs BCL11A Reverse | TTGCAAGAGAAACCATGCAC | qRT-PCR |
| Hs E2F2 Forward | AGCTGGAACCGAGAGAACATG | qRT-PCR |
| Hs E2F2 Reverse | ACACGACCAGGCGAAACC | qRT-PCR |
| Hs E2F4 Forward | GGGCAGAAGAAGTACCAGATTCA | qRT-PCR |
| Hs E2F4 Reverse | GCTCCATGCCTCCTTGTTCA | qRT-PCR |
| Hs HBB Forward | ACAACGTGTTCCTACTAGCAACC | qRT-PCR |
| Hs HBB Reverse | GTTGCCATAAACAGCATCAGG | qRT-PCR |
| Hs HBG1/HBG2 Forward | AGGTGCTGACTTCCTTGGG | qRT-PCR |
| Hs HBG1/HBG2 Reverse | GGGTGAATTCTTTGCCGAA | qRT-PCR |
| Hs KLF1 Forward | AACACGGACCCATAGACAGC | qRT-PCR |
| Hs KLF1 Reverse | TTGCACGACAGTTTGGACAT | qRT-PCR |
| Hs GAPDH Forward | GCCAAAAGGGTCATCATCTC | qRT-PCR |
| Hs GAPDH Reverse | GGTGCTAAGCAGTTGGTGGT | qRT-PCR |
| Mm Hbb-b Forward | GCTGCATGTGGATCCTGAGA | qRT-PCR |
| Mm Hbb-b Reverse | CTTCTGGAAGGCAGCCTGTG | qRT-PCR |
| Mm Hbb-bh1 Forward | TGGGCTTGGGGGTTAAGAAC | qRT-PCR |
| Mm Hbb-bh1 Reverse | AACATGTTGCCAGGAGCTT | qRT-PCR |
| Mm Hbb-y Forward | TTGGCTAGTCACTTCGGCAAT | qRT-PCR |
| Mm Hbb-y Reverse | GCATAGCGGACACACAGGAT | qRT-PCR |
| Mm Hba-a Forward | GCTGAAGCCCTGGAAAGGAT | qRT-PCR |
| Mm Hba-a Reverse | CAGAGCCGTGGCTTACATCA | qRT-PCR |
| Mm Hba-x Forward | CCGGTCAACTTCAAGCTCCT | qRT-PCR |
| Mm Hba-x Reverse | TGAACTTGTCCCAGGCTTCG | qRT-PCR |
| Mm Actb Forward | ACAGCAGTTGGTTGGAGCAAA | qRT-PCR |
| Mm Actb Reverse | GGGTGAGGGACTTCCTGTAA | qRT-PCR |
| Mm Gapdh Forward | TGGTGAAGCAGGCATCTGAG | qRT-PCR |
| Mm Gapdh Reverse | TGAAGTCGCAGGAGACAACC | qRT-PCR |

Supplementary Table 1: List of shRNA clones and primer sets used.