Table S3. CRISRPR/Cas9 primers and editing construct sequences.

| Name | Sequence (5’ to 3’) |
| --- | --- |
| hPROSER1 Knockout Reagents |
| hPROSER1 KO sgRNA spacer(PC106.PROSER1.g11) | CAAGAAGAUAUCAUAGCAUG |
| PC106.hPROSER1.DS.F2(NGS overhangs not shown) | AGCTGAGCTCCCAATGTTCA |
| PC106.hPROSER1.DS.R2(NGS overhangs not shown) | AACCATGAGAAGTTTCATATACAGC |
| hPROSER1 Tagging Reagents |
| hPROSER1 Tag sgRNA spacer(CAGE197.PROSER1.g3) | CGUCGGGAUAGUAGUCAAGA |
| CAGE197.5gen.F | CGGCGCAGTGTTGAGTTTAC |
| CAGE197.5junc.R | CCATGTTATCCTCCTCGCCC |
| CAGE197.3junc.F | TACCGATGTGATGGGCATGG |
| CAGE197.3gen.R | TCCGTTTCAGTCAAGGGTCG |
| CAGE197.g3.Flag.HA.NeonGreen.donorHomology Arms are in lower case | ggcgcgactggctttattgtaggtccccatgagctggtgggggctgtaggggtaaccaggcagggcgtctggcgctgttggggctgcgtttttccggagtccccctatgcgaggccgtgcccctcttcgcccggctcctggtgctccccagccgccggcccgctcccggaagctgcagcagctggtaacaaagagcctgccgggccgcctgctgccggggccgaggtatccaggagtcgggcggagcggctggggatgagcgcgagccggaccatgcgtccgggttcgcggcggtgagggtcgcggccggcggccgaggcgcaggtgcgggtcgagagaccggcgcctccctccccgccgcccgtggactctgagcgcaggtgtttctactctgccggccgctccacctgggaaagcgccttcaagagctacctctggcggcacctggccctcagctgcagggaaaccgcactcaaacctgccgccgagcccgggtttttctgcaaaactcagaggacctggctcttgcccgaggtgccctgaaccattgtgtgaataagctggggaagcctgactggagtgttttttctttttaataaaaagagtttttctgaatctcaatttttagaaattttttttgcgaagtttgcaatactctctacctcttcgcatcctctcttgctcgtggagtctttttcctcctcagctataaatattttttactatcggcggagcagaccagggatgaacgtcttttaattgcaagtataactgttaaaaccacgtcgggatagtagtcaagATGATGGATTACAAGGATGACGACGATAAGGGCAGCTACCCCTACGATGTTCCCGATTACGCTGGCGGCAGCGGCGGCGGCAGCGGCGGCATGGTGAGCAAGGGCGAGGAGGATAACATGGCCTCTCTCCCAGCGACACATGAGTTACACATCTTTGGCTCCATCAACGGTGTGGACTTTGACATGGTGGGTCAGGGCACCGGCAATCCAAATGATGGTTATGAGGAGTTAAACCTGAAGTCCACCAAGGGTGACCTCCAGTTCTCCCCCTGGATTCTGGTCCCTCATATCGGGTATGGCTTCCATCAGTACCTGCCCTACCCTGACGGGATGTCGCCTTTCCAGGCCGCCATGGTAGATGGCTCCGGATACCAAGTCCATCGCACAATGCAGTTTGAAGATGGTGCCTCCCTTACTGTTAACTACCGCTACACCTACGAGGGAAGCCACATCAAAGGAGAGGCCCAGGTGAAGGGGACTGGTTTCCCTGCTGACGGTCCTGTGATGACCAACTCGCTGACCGCTGCGGACTGGTGCAGGTCGAAGAAGACTTACCCCAACGACAAAACCATCATCAGTACCTTTAAGTGGAGTTACACCACTGGAAATGGCAAGCGCTACCGGAGCACTGCGCGGACCACCTACACCTTTGCCAAGCCAATGGCGGCTAACTATCTGAAGAACCAGCCGATGTACGTGTTCCGTAAGACGGAGCTCAAGCACTCCAAGACCGAGCTCAACTTCAAGGAGTGGCAAAAGGCCTTTACCGATGTGATGGGCATGGACGAGCTGTACAAGGGCGGCAGCGGCGGCGGCAGCGGCGGCatggataaaaagtcctttgaaatggtgctggatgaaattagaaaggtaattagaccgattccatgaattattttatgagatgaattctcgtgttttagactctctttgaggtactgtatggagattgtgcagaataagggtcctaggattgccaaattggtttgaattttcacgtgtaatggaggagtttatatcttgatacgtttccagtacaaatagaaattaagttacgttaacgccaaatttgagactcagcacggtgtcgtgggaattacatttgtaaagccctcggttccaaagccggctttacaaatccgtaatagctctgtactttttgggtaaggggtttaatatttttgagtttattgcctcatctttcagtaacacaagagtgactgaaaacgagaggtaatacgcagaaagtttcttttatggtagttattatgatggggttttcaaatctaagcataaggtagagtatatttgttgcgttggccatgcaaaattcgtgtcctgatggtaagtgtggcattaagtttaaagtcacgttcttaggaattggccgtcaataacttgagcttcaaaacttttttctcctgctttccaagtttttgctgctttttgaggctgttgtgtggatcgcatttcccagagtgaaccagacagcaacaattctggaaggtagtcttgagcctaacaatatctcaagcacaaaaataccgagaagttacttattttaaaatgtaaggacttgatgtaccattgttacatcaacacacggtgctttccttcggccttcc |