

Sequence	ZED Cloning primers	CRISPR/Cas9 germline deletion guides	CRISPR/Cas9 somatic deletion guides	Genotyping primers
zA	Forward: 5'-AGAGCCTATGTTGGAAACAACAC-3' Reverse: 5'-TAGCGTAGTAGGCCAGTAAAG-3'	5'-GGAGAGACAATTTTTTATG-3' 5'-GGATACATCGTGCCGCTTAG-3'	5'-TCTTTTAGGGCGCTGTGTG-3' 5'-CACTGGAATCTGCGGTAGG-3' 5'-TGTGCTGACGAGAAGAGAGC-3' 5'-AAATGCAGAGTAAACAATT-3'	Forward: 5'-GTGTGGGAAGCAAAATATAGA-3' Reverse: 5'-GGGTTAGGTGTACACATTTCATA-3'
zB	Forward: 5'-GGTAAATCTCCACCATFCGA-3' Reverse: 5'-CACCGCCGAAAACAATAGCG-3'	5'-GATAAAGGGGAGTTTAC-3' 5'-GGACCATTCAACATTGTT-3'	NA	Forward: 5'-ACCATCCGCCACACCTAAA-3' Reverse: 5'-CCGACCAACCAACCCACAGA-3'
zC	Forward: 5'-GGGATAAAGGTAAGTCAGAGCT-3' Reverse: 5'-TGGTTCATTAGGGGATTGTG-3'	5'-GGCCTTTGTGCTTCACCCC-3' 5'-GGAATAAAGAATAGGTAGA-3'	5'-CCGGCCCTGCAGGTGGTAT-3' 5'-CTCCGTGATTATCATCATT-3' 5'-ACCAGCATTATGGCTGTGTC-3' 5'-GGCCAGCGGTGGTCAGTGGG-3'	Forward: 5'-ACTCAACCGCTGGGTTAAA-3' Reverse: 5'-CAGCTCTGGTTTCCCTCAA-3'
zD	Forward: 5'-CTTTCCCAAAACAAGTGAGCCT-3' Reverse: 5'-GCAAGCTGTTTTAAGTCAGGTTAAC-3'	5'-ACCCATCTAAATTTTGT-3' 5'-TGTGTTGCGGAGTCTCCCA-3' 5'-TGTCTTTTAACCGAGTAGG-3' 5'-TTTTCTTAGTGATTTGTGT-3'	5'-ACCTCATCTAAATTTTGT-3' 5'-TGTGTTGCGGAGTCTCCCA-3' 5'-TGTCTTTTAACCGAGTAGG-3' 5'-TTTTCTTAGTGATTTGTGT-3'	Forward: 5'-CATGGAATCTATTTCTTTCCC-3' Reverse: 5'-GCTAGCGAAACTTATACAATG-3'
zE	Forward: 5'-CACGTTTTTACGCGAGCG-3' Reverse: 5'-TTGAGAGTGATCTGGCTC-3'	5'-TAGCTGCAAGTGTGGTCTTT-3' 5'-AACCCAATGTTATAATTCT-3'	5'-CCTTCTTTCATTTGTGGGG-3' 5'-GCAACATTTTGCATCTGT-3' 5'-ATTCAGTGGCTGCCATGTGT-3'	Forward: 5'-CGCAACCCATCTCTGGAAAT-3' Reverse: 5'-TGGCTCCATAGTTAAGCTGCA-3'
zF	Forward: 5'-GATTATCACCTCAACCTTTTC-3' Reverse: 5'-ACCACAGTACGACGTTAGAG-3'	5'-TTGCATATCACTAAGACAA-3' 5'-GATATGACAATGCAATATG-3'	5'-CTTGATCCTCAACAATAACA-3' 5'-TGTGGAGAACACGACAGAGA-3' 5'-AGCTCTCTCCCTCCAGG-3'	Forward: 5'-TGTAGCTGGGCTATTTTACAC-3' Reverse: 5'-ACCAACAGTGATACAGTAAGTG-3'
(D-E)	NA	5'-TAGCTGCAAGTGTGGTCTTT-3' 5'-TTCCCAAGTCTTTGTAAA-3'	NA	Forward: 5'-CGCAACCCATCTCTGGAAAT-3' Reverse: 5'-GCTAGCGAAACTTATACAATG-3'
(A-E)	NA	5'-ACGGACAACGGAAGCTATG-3' 5'-CATTAGGTTTTCTATCCAG-3'	NA	Forward: 5'-CTGTCAATCTATGGACAGAGAAC-3' Reverse: 5'-GCTGTCCAACACTGTGTGC-3'
Egr2b	NA	NA	5'-TTTGGGGAGAAAGTTCCGC-3' 5'-TGCGAATGTGGTCTCAGG-3' 5'-GGTGTGGATGCGGATGTGC-3'	Forward: 5'-TGGTTTGAAGTGGACGAGCAG-3' Reverse: 5'-CAAGGAATACCCCAACAGACC-3'
kA	Forward: 5'-TTGTGGATAATGCCTCCTGTA-3' Reverse: 5'-GTAGGCCATAATCACACCAATTG-3'	NA	NA	NA
sA	Forward: 5'-CTTATTGCTCATTTGAGGGAAGG-3' Reverse: 5'-GACTCAITGAAACCCACCATTAAG-3'	NA	NA	NA
xA	Forward: 5'-GAGCCAAACTCTTCTTGCATTGCTC-3' Reverse: 5'-GGAGTTTAGCAACAATGCTGGAG-3'	NA	NA	NA
cA	Forward: 5'-CAGCTAAGGGAAGTCCAAATC-3' Reverse: 5'-CTAAAATCCTGGTGTGCTGG-3'	NA	NA	NA
mA	Forward: 5'-CCACCTGACAGGTTGACTTC-3' Reverse: 5'-GTTGCTCTCAACGAGTTTTCG-3'	NA	NA	NA

**S1 Table. Sequences of the 3' end of the cloning primers used for constructing the ZED constructs, the 5' end of CRISPR/Cas9 RNA guides used to create the germ-line and somatic deletions and the PCR primers used to detect the deletions.**