

insrb^{ihb358/+} (CZRC catalog ID: CZ1261) 10bp deletion

Nature of the mutation

Between 26 bp to 35 bp of the wild-type *insrb* coding sequence, TTTTGGTCAC is deleted in exon 1.

Sense Strand Sequence

TTTTCATGCTTGCTCCACTAAAAGCCAGGATGCATCCGAAAAATCGCTCAAAATGATTTTCAGTCGTTTATTTT
TCTCAAGGGTGCAGGATCATGTTATTTAACACTCATTTACCCCTGCTGTGTAATGTTAGGCAACAACACTCTC
AGTTGAACATTATCTTTATCTGAAGCACGCTGGACCCCGGGTCCCCTTCTGGGGGGTCTGATTTAACTTTT
TTGTTGTTGTTTTTGATACAAGACAAACAACCTATTTTCCTTTTAATTTTGATTTTCGGACACACCAGAGGT
GGATTTAATTTTCCAAGGAAACCAAAACGTGTCGCGAGGCAGAATGCGGCTGGACACATCTGTGGTTGTTT
TGGTCACTTTCGCCTACATCTTGTGCCTCTGCGGATCACTACATGGAGAAAgtgagtaatgcctgtctataacg
ctctttaatgcgcgaattatggatgtgttgttctcaatgtgtgcgtgtttagttaca

Uppercase: Exon/coding sequence

Lowercase: intron/noncoding sequence

atcg : Forward/Reverse primer

atcg : TALEN target site

Genotyping assay

Primers:

insrb_forward: 5' TTTTCATGCTTGCTCCAC 3'

insrb_reverse: 5' TGTAAACTACAACACGCACA 3'

PCR program:

95°C 5min

95°C 30 sec

58°C 30 sec

72°C 30 sec

72°C 8min

4°C hold

} 30 Cycles

Product size: 500 bp

The sequencing results of the CZ1261(+/-):

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WT          TAATTTTCCAAGGAAACCAAAACGTGTCGCGAGGCAGAATGCGGCTGGACACATCTGTGG
CZ1261      TAATTTTCCAAGGAAACCAAAACGTGTCGCGAGGCAGAATGCGGCTGGACACATCTGTGG
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WT          TTGTTTTGGTCACTTTTCGCCTACATCTTGTGCCTCTGCGGATCACTACATGGAGAAAgtg
CZ1261      TTG-----TTTCGCCTACATCTTGTGCCTCTGCGGATCACTACATGGAGAAAgtg
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WT          agtaatgcctgtctataacgctctttaatgcgcgaattatggatgtgttctcaatg
CZ1261      agtaatgcctgtctataacgctctttaatgcgcgaattatggatgtgttctcaatg
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Reference:

Binyuan Yang, Gang Zhai, Yulong Gong, Jingzhi Su, Dong Han*, Zhan Yin, Shouqi Xie, Depletion of insulin receptors leads to b-cell hyperplasia in zebrafish. Science Bulletin, 2017. 62(7): 486-492 (Journal)