

fscn1a^{ioz100/+} (AB) (CZRC catalog ID: CZ 288)

Nature of the mutation

Between 695 bp to 702 bp of the wild-type *fscn1a* coding sequence, GTCCAGTC, is mutated to C.

Sense Strand Sequence

GCACCGAGGACAGGATAACCTGCTTCGCCAGACCATCTCCATCGCGGAGAAATGGA
GCGTGCACATCGCCATGCACCCACAGGTCAACATCTTCAGCGTGACTAGAAAAAGGT
ACGCGCACCTGAGCTCTGAGCAGAACGAGATAGCCATCGACCGGGATGTACCCTGGG
GCGTGGATTCCCTCATCACCCCTGGTCTTCCAGGACCAGAGGTACCACCTTCAGACCTC
CGACAACCGCTTCCTGAAGAACGACGGCAGCCTGTCCCAGACGGCGGATAAGACTAC
GGTTACACGCTGGAGTTCAGGTCTGGGAAGGTGGCCTTCAGAGACTGCACCGGGAA
GTACCTAGCTCCCTCTGGTCCCAGTGGAAACCATGAAGTCCGGCAAGAGCATGAAGGT
TGGCAAGGATGAGCTCTTCGTTCTGGAGCAGAGCCATCCGCAAGTGGTCTCACCGCT
GGCAACGACAGGAATGTGTCCACCAGACAAGgtaaatgatgccgctttgtgtc

Uppercase: Exon/coding sequence

Lowercase: intron/noncoding sequence

atcg : Forward/Reverse primer

Genotyping assay

Primers:

*fscn1a*_forward: 5' GCACCGAGGACAGGATAACC 3'

*fscn1a*_reverse: 5' GACAACAAAGCGGCATCATT 3'

PCR program:

95°C 5min

95°C 30 sec

60°C 30 sec

72°C 30 sec

72°C 8min

4°C hold

} 30 Cycles

Product size: 412 bp

The sequencing results of the CZ288(-/-):

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WT          CCGGGATGTACCCTGGGGCGTGGATTCCCTCATCACCTGGTCTTCCAGGACCAGAGGTA
CZ288       CCGGGATGTACCCTGGGGCGTGGATTCCCTCATCACCTGGTCTTCCAGGACCAGAGGTA
*****

WT          CCACCTTCAGACCTCCGACAACCGCTTCCTGAAGAACGACGGCAGCCTGTCCCAGACGGC
CZ288       CCACCTTCAGACCTCCGACAACCGCTTCCTGAAGAACGACGGCAGCCTGTCCCAGACGGC
*****

WT          GGATAAGACTACGGGTTACACGCTGGAGTTCAGGTCTGGGAAGGTGGCCTTCAGAGACTG
CZ288       GGATAAGACTACGGGTTACACGCTGGAGTTCAGGTCTGGGAAGGTGGCCTTCAGAGACTG
*****

WT          CACCGGAAGTACCTAGCTCCCTCTGGTCCCAGTGGAAACCATGAAGTCCGGCAAGAGCAT
CZ288       CACCGGAAGTACCTAGCTCCCTCT-----GCGAAACCATGAAGTCCGGCAAGAGCAT
*****

WT          GAAGGTTGGCAAGGATGAGCTCTTCGTTCTGGAGCAGAGCCATCCGCAAGTGGTCCTCAC
CZ288       GAAGGTTGGCAAGGATGAGCTCTTCGTTCTGGAGCAGAGCCATCCGCAAGTGGTCCTCAC
*****

WT          CGCTGGCAACGACAGGAATGTGTCCACCAGACAAGgtaaatgatgcegettgtgtcg
CZ288       CGCTGGCAACGACAGGAATGTGTCCACCAGACAAGgtaaatgatgcegettgtgtcg
*****
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Reference:

Liu Z, Ning G, Xu R, Cao Y, Meng A, Wang Q. Fcsl1 is required for the trafficking of TGF- β family type I receptors during endoderm formation. Nat Commun. 2016 Aug 22;7:12603.