



Welcome to The Genotyping Protocol System

Master Protocol

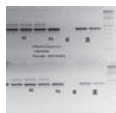
Strain Name: C57BL/6NJ-Zfp422^{em1J}J
Stock Number: 028308
Allele: Zfp422^{em1J}
Protocol Name: Zfp422^{em1J}
Method: Standard PCR
Created: 01-December -2015 (EST) **Updated:** 02-December -2015 (ESCHAAB)

Notes

Notes: This allele from project Zfp422-7040J M#1223 was generated at The Jackson Laboratory by injecting Cas9 RNA and 2 guide sequences: CCACACTCATCACAGCAGTA, GTGGCCATTCGCTTCGACTC, which resulted in a 301 bp deletion beginning in exon 2 at Chromosome 6 negative strand position 116,626,917 bp (CTCGGGCTTGAGTCGACGGA) and ending after (ACCGGCGAGAAGCCCTACTGC) at 116,626,617bp (GRCm38/mm10) in exon 2. This mutation results in the deletion in exon 2 of 301 bp and results in an amino acid sequence change after residue 40 and early truncation 41 amino acids later.

Expected Results: Mutant = 557 bp
Heterozygote = 420 bp and 557 bp
Wild type = 420 bp

Attachments



[View](#) Mplex gel 28308 12-1-15.jpg

- [View](#) Zfp422 genomic1.gcs
- [View](#) Zfp422em1j_moldes_9-24-15_in progress.docx

Protocol Primers

Primer	5' Label	Sequence 5' --> 3'	3' Label	Description	Reaction
25157	-	TTG AAG AGG TGC TAG TGC TGA	-	Common	A
25158	-	CAC AAT CGG CAC ATT TAT GG	-	Wild type Reverse	A
25159	-	TTT TAA AAA GGC CGG AAG TG	-	Mutant Reverse	A

Number Of Reactions 1

Reaction A (3 primer)		Cycling (TouchDown 65-60_12-12-11)			
Component	Final Concentration	Step #	Temp°C	Time	Note
ddH2O		1	94	2 min	-
Kapa 2G HS buffer	1.3 X	2	94	20sec	-
MgCl2	2.6 mM	3	65	15sec	-0.5 C per cycle decrease
dNTP KAPA	.26 mM	4	68	10sec	-
25158	.5 uM	5	-	-	repeat steps 2-4 for 10 cycles (Touchdown)
25159	.5 uM	6	94	15sec	-

Reaction A (3 primer)		Cycling (TouchDown 65-60_12-12-11)			
25157	.5 uM	7	60	15sec	-
Glycerol	6.5 %	8	72	10sec	-
Dye	1 X	9	-	-	repeat steps 6-8 for 28 cycles
Kapa 2G HS taq polymerase	.03 U/ul	10	72	2 min	-
DNA		11	10	-	hold

Version 3.2