

B6;129P2-Bace2^{tm1Bdes}/J

Stock No: 005618

Protocol 33733: Standard PCR Assay - Bace2<tm1Bdes> Alternate1

Version 1.0

Notes

The genotyping protocol(s) presented here have been optimized for reagents and conditions used by The Jackson Laboratory (JAX). To genotype animals, JAX recommends researchers validate the assay independently upon receipt of animals into their facility. Reaction cycling temperature and times may require additional optimization based on the specific genotyping reagents used.

Expected Results

Mutant = ~450 bp

Heterozygote = ~450 bp and 386 bp

Wild type = 386 bp

 >[chr16:97636768+97637153](#) 386bp CTGTGGCACGAACATCTCTG GATGCCCGAATAACAAGAGC

JAX Protocol

Protocol Primers

PRIMER	5' LABEL	SEQUENCE 5' → 3'	3' LABEL	PRIMER TYPE	REACTION	NOTE
42081		GAG ACC AAA GCC CAC AAA TC		Mutant Forward	A	
42082		CTG TGG CAC GAA CAT CTC TG		Wild type Forward	A	
42083		GAT GCC CGA ATA ACA AGA GC		Common	A	

Reaction A

COMPONENT	FINAL CONCENTRATION
ddH2O	
Kapa 2G HS buffer	1.30 X
MgCl ₂	2.60 mM
dNTP KAPA	0.26 mM
42081	0.50 uM
42082	0.50 uM
42083	0.50 uM
Glycerol	6.50 %
Dye	1.00 X
Kapa 2G HS taq polym	0.03 U/ul
DNA	

Cycling

STEP	TEMP °C	TIME	NOTE
1	94.0	--	
2	94.0	--	
3	65.0	--	-0.5 C per cycle decrease
4	68.0	--	
5		--	repeat steps 2-4 for 10 cycles (Touchdown)
6	94.0	--	
7	60.0	--	
8	72.0	--	
9		--	repeat steps 6-8 for 28 cycles
10	72.0	--	
11	10.0	--	hold

JAX uses a very high speed Taq (~1000 bp/sec), use cycling times recommended for your reagents.

JAX uses a 'touchdown' cycling protocol and therefore has not calculated the optimal annealing temperature for each set of primers.

