

GENOTYPING BY PCR PROTOCOL FORM
MUTANT MOUSE REGIONAL RESOURCE CENTER: UC DAVIS
 2795 2nd Street, Suite 400, Davis, CA 95618
mmrrc@ucdavis.edu
 530-754-MMRRC

NAME OF PCR: B6.129S6-Btla^{tm1Kay}/Mmcd **MMRRC #** 030472-UCD

DNA Extraction Method: ☐ NaOH ☐ Proteinase K ☐ Other: _____

Protocol:

Reagent/ Constituent	Volume (µL)
Water	38.8
10x Buffer	5.0
50 mM MgCl ₂	2.0
dNTPs (stock concentration is 10 mM)	1.0
Primer 1 (stock concentration is 5 mM)	2.0
Primer 2 (stock concentration is 5 mM)	2.0
Primer 3 (stock concentration is 5 mM)	2.0
Taq Polymerase 5 Units/mL	0.2
DNA Sample	1.0
TOTAL VOLUME OF REACTION:	50 µL

Comments on protocol (e.g., different concentration of MgCl₂, etc):

Strategy:

Steps	Temp (°C)	Time (m:ss)	# of Cycles
1. Initiation/Melting HOT START?..CHECK HERE ☐	94	5:00	1
2. Denaturation	94	0:30	} 33x
3. Annealing } steps 2-3-4 will cycle in sequence	58	0:40	
4. Elongation	72	0:30	
5. Amplification (i.e., 72°C, 10 min)	72	5:00	1
6. Finish (i.e., 4°C, indefinite)		n/a	n/a

Primers:

Primer Name	Nucleotide Sequence (5' - 3')
1:	5'-TCCAAACAGTCTGCCAGGACAGGA
2:	5'-TGGCGCCTACCGGTGGATGTGGAATG
3:	5'-TGGAGAACAAAAACCGGAAGTATTGA

Electrophoresis Protocol:

% Agarose: _____ **V:** _____

Estimated Running Time (min): _____

Primer Combination	Band	Genotype
	150 bp	wild-type
	250 bp	knockout