

RMRC Genotyping Protocol-PCR

No.	RMRC13136	Strain Name	C57BL/6- Trbc1 ^{tm1} (TRBC1)Abgn>
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A. Primer

	Primer name	Sequence
1	TCR-C1-f	5' - GAC-AAG-GGC-AGA-AAA-CAA-GC-3'
2	mTCRB-C1-ex1_37r	5' - AAG-GAG-ACC-TTG-GGT-GGA-GT-3'
3	hTCR-C1-Ex1_306r	5' -GCC-CGT-AAA-ACT-GGA-CTT-GA-3'

B. Reaction Conditions

Component	Concentration		Volume		Step	Temperature, °C	Time, sec	Number of Cycles
H ₂ O	--		1.8	μl	1	95	600	1
REDTaq ReadyMix	--		5	μl	2	94	30	
Primer 1	10	μM(ρmol/μl)	0.4	μl		55	30	
Primer 2	10	μM(ρmol/μl)	0.4	μl		72	30	30
Primer 3	10	μM(ρmol/μl)	0.4	μl	3	72	420	1
DNA	5ng/ul~10ng/ul		2	μl				
				μl				
				μl				
Total			10	μl				

C. PCR Product

	Primer set	Product size	Target region
1	TCR-C1-f mTCRB-C1-ex1_37r hTCR-C1-Ex1_306r	170, 439 bp	Heterozygous: 170 & 439 bp Homozygous: 439 bp
2			

D. Gel Photo

