

Tpm1 (MAAA; EPD0001_3_G07)

Allele: *Tpm1*^{tm1a(EUCOMM)Wtsi}

Genetic background (For embryos supplied to EMMA Node):
129S5/SvEvBrd.129S7/SvEvBrd

Genotyping information

These mice are genotyped through a combination of separate PCR reactions that detect lacZ, the gene-specific wild type allele, and a mutant allele-specific short range PCR. Interpretation of the consolidated results produces the genotype of the mice. For example: LacZ positive, mutant positive, wild type positive = heterozygous.

➤ PCRs primer pairs and expected size bands

PCR type	Forward primer	Reverse primer	Expected size band (bp)
Mutant PCR	Tpm1_5_F	CAS_R1_Term x	339
Wild type PCR	Tpm1_5_F	Tpm1_5_R	601
LacZ PCR	LacZ_2_small_F	LacZ_2_small_R	108

➤ Primer sequences

Primer name	Primer sequence (5' > 3')
CAS_R1_Term	TCGTGGTATCGTTATGCGCC
Tpm1_5_F	TCCCAGCCTCAGAGCAAAAG
Tpm1_5_R	CTTATCCAGACTCAGCCACGG
LacZ_2_small_F	ATCACGACGCGCTGTATC
LacZ_2_small_R	ACATCGGGCAAATAATATCG

➤ Cycling conditions

Wild type and mutant PCRs

Cycle	Temperature	Time
1	94 °C	5 min
2	94 °C	30 sec
3	58 °C	30 sec
4	72 °C	45 sec
5	Go to '2' + 34 cycles	
6	72 °C	5 min
7	12 °C	forever

Lac Z PCR

Cycle	Temperature	Time
1	94 °C	5 min
2	94 °C	30 sec
3	60 °C	30 sec
4	72 °C	30 sec
5	Go to '2' + 34 cycles	
6	72 °C	5 min
7	12 °C	foreve