

Wellcome Trust Sanger Institute Wellcome Trust Genome Campus Hinxton Cambridge CB10 1SA, U.K.

MGPgenotyping@sanger.ac.uk www.sanger.ac.uk

Mx1 (MCKF; EPD0339_5_C12)

Allele: Mx1^{tm1a(EUCOMM)Wtsi}

Genotyping Information

These mice may be 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	Mx1_39033_F	CAS_R1_Term x	112
Wild type PCR	Mx1_39033_F	Mx1_39033_R	412
LacZ PCR	LacZ_2_small_F	LacZ_2_small_R	108

Primer sequences

Primer name	Primer sequence (5' > 3')	
CAS_R1_Term	TCGTGGTATCGTTATGCGCC	
Mx1_39033_F	GGTTCTCCCAGAGCATCCTG	
Mx1_39033_R	CCTTGTGAAGACAGAGGGGG	
LacZ_2_small_F	ATCACGACGCGCTGTATC	
LacZ_2_small_R	ACATCGGGCAAATAATATCG	

 $This \ technical \ data \ sheet \ and \ information \ ("Data sheet") \ is \ supplied \ by \ Genome \ Research \ Limited \ ("GRL").$

Although reasonable care is taken in the preparation of this Datasheet, GRL gives no warranties express or implied for any use of the Datasheet or for the accuracy of the Datasheet. GRL assumes no responsibility or liability for any decisions based upon the Datasheet. Without limiting the foregoing the Datasheet was prepared for mice supplied directly from GRL and where copies of this Datasheet are available from third party repositories or distribution centres ("Third Parties") GRL shall not be liable for any inconsistency between the mouse strain supplied by the Third Party and the Datasheet howsoever arising.

Last updated: 08/08/2011



Wellcome Trust Sanger Institute Wellcome Trust Genome Campus Hinxton Cambridge CB10 1SA, U.K.

MGPgenotyping@sanger.ac.uk www.sanger.ac.uk

Reaction

Reagent	μΙ
DNA (~50-100 ng)	1.0
10x Buffer	2.0
MgCl ₂ (50 mM)	0.6
PtTaq (Platinum® Taq (Invitrogen))	0.2
dNTPs (100 mM)	0.2
Primer 1 (10 μM)	0.4
Primer 2 (10 μM)	0.4
H_2O	<u>15.2</u>
Total	20.0

Cycling conditions

Wild type and mutant PCRs

Whatype and mutant i ONS		Lack I ON			
Cycle	;		Cycle		
1	94 °C	5 min	1	94 °C	5 min
2	94 °C	30 sec	2	94 °C	30 sec
3	58 °C	30 sec	3	60 °C	30 sec
4	72 °C	45 sec	4	72 °C	30 sec
5		' + 34 cycles	5		+ 34 cycles
6	72 °C	5 min	6	72 °C	5 min
7	12 °C	forever	7	12 °C	forever

Lac7 PCR

 $This \ technical \ data \ sheet \ and \ information \ ("Datasheet") \ is \ supplied \ by \ Genome \ Research \ Limited \ ("GRL").$

Although reasonable care is taken in the preparation of this Datasheet, GRL gives no warranties express or implied for any use of the Datasheet or for the accuracy of the Datasheet. GRL assumes no responsibility or liability for any decisions based upon the Datasheet. Without limiting the foregoing the Datasheet was prepared for mice supplied directly from GRL and where copies of this Datasheet are available from third party repositories or distribution centres ("Third Parties") GRL shall not be liable for any inconsistency between the mouse strain supplied by the Third Party and the Datasheet howsoever arising.

Last updated: 08/08/2011