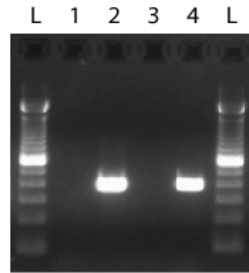


Ple50 Promoter PCR (pEMS1361)

MiniPromoter: Ple50
pEMS#: 1361
Expected product size (bp): 393

Reaction components	Vol/Rxn (µl)
H ₂ O	15.15
10X PCR buffer*	2.5
50 mM MgCl ₂ *	0.75
2.5 mM dNTPs**	2
10 µM oEMS2470	1.25
10 µM oEMS2474	1.25
Taq Pol. (5 U/µl)*	0.1
DNA***	2
Total Volume of Rxn:	25



1- WT mouse DNA
 2- Control plasmid DNA (pEMS1361)
 3- No Template
 4- Knock-in ESC line
 L- 100 bp ladder
 expected band size = 393 bp

* Taq Polymerase set from Invitrogen (Cat no.18038-042)

** dNTPs from Invitrogen (Cat no.10297-018)

***Approximately 100 ng DNA used for samples, approximately 5 ng used for plasmid control

Samples run on a 2% agarose gel (containing SYBRsafe (Invitrogen Cat no. S33102))

Cycling conditions:	Step	Temp	Time	Note
	1	94°C	3 min	
	2	94°C	1 min	
	3	61°C	1 min	
	4	72°C	45 sec	reapeat steps 2-4 34 times
	5	72°C	5 min	
	6	4°C	hold	

Primers:

Name	Sequence	Tm (°C)	Notes
oEMS2470	5'- CAGCCTTATTATTCCTCCCTAAGCA -3'	56.3	Sense primer located in Ple50 MiniP sequence region "2"
oEMS2474	5'- CCCTCCTCTAATTGGCACTAATGAC -3'	56.3	Anti-sense primer located in Ple50 MiniP sequence region "Prom"