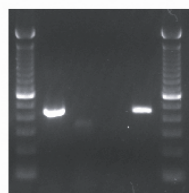


### Ple111 Promoter PCR (pEMS1417)

**MiniPromoter:** Ple111  
**pEMS#:** 1417  
**Expected product size (bp):** 472

<u>Reaction components</u>	<u>Vol/Rxn (µl)</u>
H <sub>2</sub> O	15.15
10X PCR buffer*	2.5
50 mM MgCl <sub>2</sub> *	0.75
2.5 mM dNTPs**	2
10 µM oEMS2364	1.25
10 µM oEMS2294	1.25
Taq Pol. (5 U/µl)*	0.1
DNA***	2
Total Volume of Rxn:	25

L 1 2 3 4 L



1 - Control Plasmid DNA (pEMS1417)  
2- WT mouse DNA  
3 - No Template  
4- Knock-in ESC line (mEMS1774)  
Expected band size = 472 bp

Note: Junk band appears in WT DNA at approx. 350 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))

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

### Primers:

<u>Name</u>	<u>Sequence</u>	<u>T<sub>m</sub> (°C)</u>	<u>Notes</u>
<b>oEMS2364</b>	5'- GCGTATCACGAGGCCCTTTC-3'	56.0	Sense primer located in Vector backbone 5' to MCS
<b>oEMS2294</b>	5'- AAGTCTAAGATTAGCCTGCTGCAGG-3'	56.6	Anti-sense primer located in Ple111 MiniP sequence region "Prom"