

**Ple109 Promoter PCR (pEMS1254)****Pleiades Promoter Project**

**MiniPromoter:** Ple109  
**pEMS#:** 1254  
**Expected product size (bp):** 695

<b>Reaction components</b>	<b>Vol/Rxn (μl)</b>
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 forward primer	1.25
10 μM reverse primer	1.25
Taq Pol. (5 U/μl)*	0.1
DNA***	2
Total Volume of Rxn:	25

\* 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))

<b>Cycling conditions:</b>	<b>Step</b>	<b>Temp</b>	<b>Time</b>	<b>Note</b>
	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:**

<b>Name</b>	<b>Sequence (5' to 3')</b>	<b>Tm (°C)</b>	<b>Notes</b>
<b>oEMS3182</b>	TCTTGTGCCCAAGCCCTCAT	56.8	Sense primer for Ple109, in regions "6" and "7"
<b>oEMS3130</b>	TCTAGTCTCTGGAGTGGCTTCCTC	56.3	Antisense primer for Ple109, in region "Prom"