

## MMRRC UNC – Genotyping Protocol

<b>MMRRC Strain ID</b>	36898
<b>MMRRC Strain Name</b>	129S/Sv-Omp <sup>tm1Fim</sup> /Mmnc
<b>Gene Name(s)</b>	olfactory marker protein (Omp)
<b>Breeding Protocol(s)</b>	Sib-mating
<b>Protocol Date</b>	9/23/13

### MMRRC #36898 PCR Reaction

**Thermal Cycler:**

Step 1: 94°C for 5 min  
 Step 2: 94°C for 60 sec  
 Step 3: 56°C for 60 sec  
 Step 4: 72°C for 90 sec  
 Step 5: Step 2 to 4; Cycles: 35  
 Step 6: 72°C for 7 min

	<b><u>1X</u></b>
ddH <sub>2</sub> O	13
5X Buffer	5
25 mM MgCl <sub>2</sub>	2
10 mM dNTPs	0.5
10 μM Primer F	1
10 μM Primer R	1
Taq	0.5
DNA	2

**Taq: Apex and Chromataq 5X Buffer**

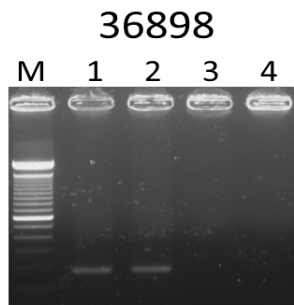
**Primer sequences 5' to 3':** Primers are 10 μM with respect to each primer.

OmpFor (36898): TGG CAA CAG CTG TAG CAC TT  
 OmpRev (36898): ACA GAG GCC TTT AGG TTG GC  
 NeoF (36898): GTG AAT GAA CTG CAG GAC GA  
 NeoR (36898): ATA CTT TCT CGG CAG GAG CA

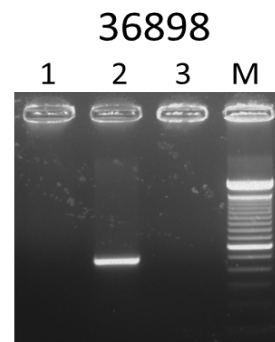
**Bands expected:**

(Neo F + Neo R) MUTANT: 170 bp  
 (OMP For + OmpRev) WT: 500 bp

Run on 2.0% agarose gel in TAE.



Primers: NeoF (36898) + NeoR (36898)  
 Lane 1, 2: Homo; Lane 3: Wt; Lane 4: H<sub>2</sub>O;  
 M: 100 bp DNA ladder (Invitrogen)



Primers: OmpFor (36898) + OmpRev (36898)  
 Lane 1: Homo; Lane2: Wt; Lane 3: H<sub>2</sub>O;  
 M: 100 bp DNA ladder (Invitrogen)