

**GENOTYPING BY PCR PROTOCOL**  
**MUTANT MOUSE REGIONAL RESOURCE CENTER: UC DAVIS**

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530-754-MMRRC

NAME OF 129S(Cg)-Tg(Hoxb7-Ret)1Cos/MmuCD MMRRC # 036720-UCD

Protocol: *(PCR protocol provided by Donating Investigator)*

Reagent/ Constituent	Volume ( $\mu$ L)
Water	41
10x Buffer (15mM MgCl <sub>2</sub> )	5
dNTPs (stock concentration is 10mM)	0.5
Primer 1 (stock concentration is 10 $\mu$ M)	1
Primer 2 (stock concentration is 10 $\mu$ M)	1
Primer 3 (stock concentration is $\mu$ M)	
Primer 4 (stock concentration is $\mu$ M)	
Taq Polymerase	0.5
Additives / Other (if applicable):	
DNA sample extracted <input type="checkbox"/> NaOH <input checked="" type="checkbox"/> Proteinase K <input type="checkbox"/> Other:	1
<b>TOTAL VOLUME OF REACTION:</b>	(auto-calculated based on volumes entered above, right click the total and update field to show/recalculate total) <b>50 <math>\mu</math>L</b>

**Strategy:**

Steps	HOT START? <input type="checkbox"/>	Temp (°C)	Time (m:ss)	# of Cycles
1. Initiation/Melting				
2. Denaturation		94	40ss	
3. Annealing	 steps 2-3-4 will cycle in sequence	55	40ss	32
4. Elongation		72	1m10ss	
5. Amplification (i.e., 72°C, 10 min)		72	7m	1
6. Finish (i.e., 4°C, indefinite)		4	indefinite	n/a

**Primers:**

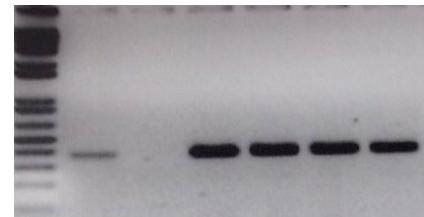
Name	Nucleotide Sequence (5' - 3')
1. Abra	TTC GGA CTC ACT GCT GTA TGA C
2. Kadabra	ACG ATC CTG AGA CTT CCA CAC T
3.	
4.	

**Electrophoresis Protocol:**

Agarose: 1% V: 24 ul

Estimated Running Time: 35 min.

Primer Combination	Expected Bands	Genotype
P1+P2	350 bp	transgenic



**Lane 1 – markers**  
**Lane 2 – positive control**  
**Lane 3 – negative control**  
**Lanes 4-7, samples (all positive)**

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