

# KOMP PCR Design

Mouse PCR Protocol (version 1)

Design ID: 178585

Project ID: CSD66231

Selection Cassette: L1L2\_Bact\_P



Mutant Mouse Resource & Research Centers supported by NIH

MMRRC Stock #: 046497-UCD

C57BL/6N-Atm1Brd Adcy5tm1e(KOMP)Wtsi/

Mmucd

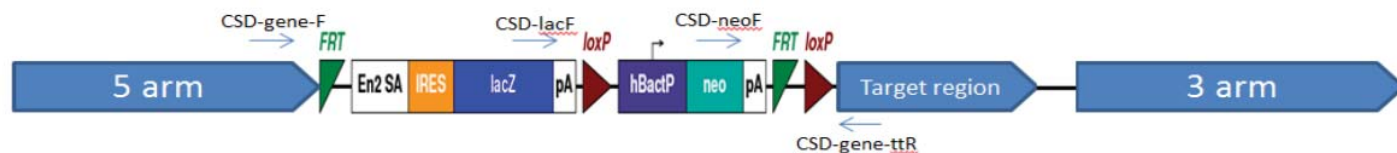
## Suggested DNA Prep: DNeasy® Tissue Kit

Reagent	1X (μL)
water (biological grade)	10.725
betain 5M (Sigma)	6.5
DMSO (Sigma)	0.325
10X buffer w/o MgCl <sub>2</sub> (AB)	2.5
25 mM MgCl <sub>2</sub> (AB)	1.75
10 mM dNTPs (Invitrogen)	0.5
primers (20 μM each)	0.5
Taq 5U/μL (AmpliTaq, AB)	0.2
total cocktail	23
template	2
reaction volume	25

## Cycling Parameters

Temperature °C	Time	
94	5 min	
94	15 sec	10X (decrease 1°C/cycle)
65	30 sec	
72	40 sec	
94	15 sec	30X
55	30 sec	
72	40 sec	
72	5 min	
4	finished	

## Primer Strategy



## Cassette Primers

CSD-lacF: GCTACCATTACCAGTTGGTCTGGTGTC  
CSD-neoF: GGGATCTCATGCTGGAGTTCTTCG

## Gene Specific Primers

CSD-Adcy5-ttR: GTATTCATACAGGCCAGAAGAGGGC  
CSD-Adcy5-F: AATCACCACACTTTATGCACGAGCC

## Genotype Forward Primer Reverse Primer Amplicon size (bp)

PreCre	CSD-neoF	CSD-Adcy5-ttR	621
PostCre	CSD-lacF	CSD-Adcy5-ttR	572
Wildtype	CSD-Adcy5-F	CSD-Adcy5-ttR	514
PostFlp	CSD-Adcy5-F	CSD-Adcy5-ttR	660

Please note, these primers are auto-designed and may not have been verified by the repository, and as such may require optimization or redesign by your facility.

We recommend running primers singleplex. For screening of pups prior to any Flp or Cre recombination, the PreCre primers may be used to identify the mutant mice. The PostCre primers should be used if mutant mice were crossed with a Cre recombinase line. The PostFlp primers should be used if mutant mice were crossed with a Flp recombinase line. The wildtype primers should be used for zygosity testing of all mutant mice (pre or post recombination).