

KOMP PCR Design

Mouse PCR Protocol (version 1JE)

Design ID: 12498

Project ID: VG12498

Selection Cassette: ZEN-Ub1



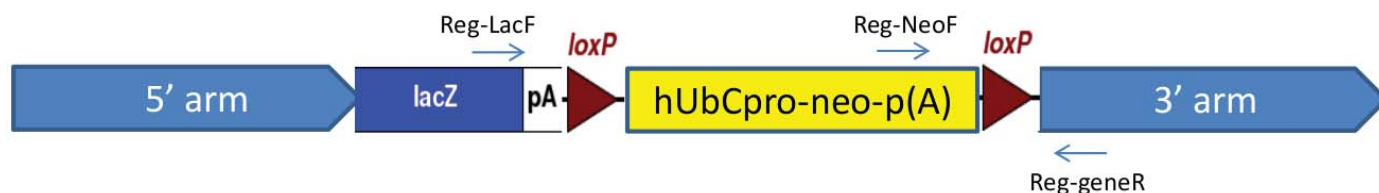
MMRRC Stock #: 049213-UCD

C57BL/6N-Prok2tm1(KOMP)Vlclg/Mmucd

Suggested DNA Prep: DNeasy®Tissue Kit

Reagent	1X (μL)	Cycling Parameters	
water (biological grade)	10.725	Temperature °C	Time
betain 5M (Sigma)	6.5	94	5 min
DMSO (Sigma)	0.325	94	15 sec
10X buffer w/o MgCl ₂ (AB)	2.5	65	30 sec
25 mM MgCl ₂ (AB)	1.75	72	40 sec
10 mM dNTPs (Invitrogen)	0.5	10X (decrease 1°C/cycle)	
primers (20 μM each)	0.5		
Taq 5U/μL (AmpliTaq, AB)	0.2		
total cocktail	23	94	15 sec
template	2	55	30 sec
reaction volume	25	72	40 sec
		72	5 min
		4	finished
		30X	

Primer Strategy



Cassette Primers

Reg-NeoF: GCAGCCTCTGTTCCACATACACTTCA
Reg-LacF: ACTTGCTTTAAAAACCTCCCACA

Gene Specific Primers

Reg-R: CAAAGGGCAAAGGAAGTTTCTGC
Reg-wtF: CTCCCTTTCACCGTGAAGTTCTCC

Reg-wtR: TAACGAGTAAAACAACAGCCAACAGC

Geneotype	Forward Primer	Reverse Primer	Amplicon size (bp)
PreCre	Reg-NeoF	Reg-R	468
PostCre	Reg-LacF	Reg-R	668
Wildtype	Reg-wtF	Reg-wtR	285

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 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 wildtype primers should be used for zygosity testing of all mutant mice (pre or post recombination).