

KOMP PCR Design

Mouse PCR Protocol (version 1)

Design ID: 17207

Project ID: VG17207

Selection Cassette: ZEN-Ub1



Mutant Mouse Resource & Research Centers supported by NIH

MMRRC Stock #: 050103-UCD

C57BL/6N-Tmem136tm1.1(KOMP)Vlcg/JMmuccd

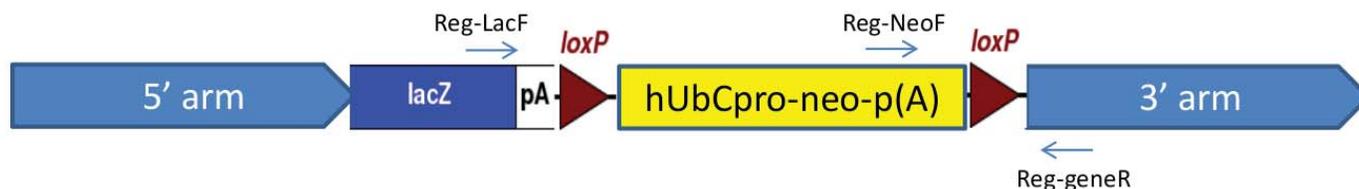
Suggested DNA Prep: DNeasy®Tissue Kit

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

Cycling Parameters

Temperature $^{\circ}$ C	Time
94	5 min
94	15 sec
65	30 sec
72	40 sec
94	15 sec
55	30 sec
72	40 sec
72	5 min
4	finished

Primer Strategy



Cassette Primers

Reg-NeoF: GCAGCCTCTGTTCCACATACACTTCA
Reg-LacF: ACTTGCTTTAAAAACCTCCCACA

Gene Specific Primers

Reg-Tmem136-R: GATACTTGAATGCCTGACCCATGCC
Reg-Tmem136-wtR: GGTCTCATATAACCCAGACTGGCCC
Reg-Tmem136-wtF: CAAGACAGAAGACAACATGGCTGGG

Genotype	Forward Primer	Reverse Primer	Amplicon size (bp)
PreCre	Reg-NeoF	Reg-Tmem136-R	616
PostCre	Reg-LacF	Reg-Tmem136-R	816
Wildtype	Reg-Tmem136-wtF	Reg-Tmem136-wtR	237

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).