

**Table S5.** Primers used for verification of targeted homologous recombination.

PCR of genomic DNA to confirm deletion of exon 2		
11 4-P53 5'screen	forward	5'-ctgggagaaggtgcatgat
25-P53N EOKO	reverse	5'-gttggtcccagtcatagccg
Forward primer is outside homology arm; reverse primer is within targeting vector		
PCR of genomic DNA to confirm cre excision of exon 2 targeting vector		
92-P53 exon 2	forward	5'-gggttgaagtgtctcatgc
93-P53 exon 2	reverse	5'-tcccacaggtctctgctagg
Both primers are in intronic regions flanking exon 2.		
PCR of genomic DNA to check for insertion of targeting sequence of KI clones prior to cre excision		
1 25-p53e7screen	forward	5'-ctgccgtctccagtgc
25-P53N EOKO	reverse	5'-gttggtcccagtcatagccg
Forward primer is outside homology arm; reverse primer is within targeting vector		
PCR of genomic DNA to confirm cre excision of KI clones		
1 25-p53e7screen	forward	5'-ctgccgtctccagtgc
1 30-SEPTCREOUT	reverse	5'-gcacagtgtacctaaaattgg
Forward primer is outside homology arm; reverse primer is within targeting vector		
RT-PCR of exon 7 for confirmation of knockin sequence		
1 54-p53e7rt	forward	5'-gtggtggtgccctatgac
1 55-p53e7	reverse	5'-acaaacacgcacctcaaagc