

**Table S3.** Summary of primer sequences for repair template and PCR screening

Name	Sequence
C_PIE-1 PF	ATAGCCCGATTTTGGAGGTG
C_PIE-1 PR	CCTCGAATTTTGGCAATTTTTC
C_PIE-1 301L	ATGGATTTCTCGCCGTTTTTTC
C_PIE-1 318R	GTTGTATCCACGTCGTCTCG
C_PIE-1(K68A)_F	GGAAAATGGCTTCGTCCAGCACGTGAAGCG
C_PIE-1(K68A)_R	CTTGAGCGCTTCACGTGCTGGACGAAGCC
C_PIE-1(K68R)_F	GGAAAATGGCTTCGTCCAGCACGTGAAGCG
C_PIE-1(K68R)_R	CTTGAGCGCTTCACGCCTAGGACGAAGCC
C_PIE-1 a MF	GCTATGTCTTTTAGTTGCAGGCGCCTC
C_PIE-1 a MR	CAGATTGACGAGGCGCCTGCAACTAA
SMO-1 PF	CGATTTTTCGGCTCATTTCG
SMO-1 PR	CCTCGTCAAATCCGAAATCG
SMO MF	CACCCATCAATCCCTTTTC
SMO MR	GAAAAGGGATTGATGGGTG
P1F	GTTTTTGCCCCCAAATTC
P1R	TGATGCTTCGATGCTGAAGA
P2F	GGCGTCAAAAGACATATGTAAAAG
P2R	CGCAATGGATGATTTTTGTC
P3F	GCCGAGCTATGTCTTTTAG
P3R	CTCAAGATCACTCCATTGGC
P4F	GGCGGTGCGTTTGAAGTGT
P4R	GGAAATAATAGTTGGTGGTGGC
P5F	CCATATTTTGTTTTGTATATTTATC
P5R	GGCACAAGTTCATTACAGG
P6F	GCGCAGCGAATTTTTGGGGT
P6R	TATCACAATTCTCTCCGTGC
P7R	CGGAGAACTTGCCAAAATGAAG
S1F	GAAGTGCACCTCCGTGTAAAGTATGGAACC
S1R	CCGGCTGCTATTTTCATTGAT
MC. OUT F1 (vet-2)	GCTCAAGAAAGCCAATGGAG
MC. OUT R1 (vet-2)	TTCTGAACCAGTCGATGCAG
MC.IN F1 (vet-2)	ATGGAGGGATCTGTCAATGG
MC.IN R1 (vet-2)	TGGCAGTCGAGACACTTCAG
FL. IN F1 (vet-2)	CACAAAACCGGCCAAAAA
FL. IN R1 (vet-2)	TCGGTCTTGCAGAAACCAC
OM-F	CAACGTTTGC GTGTACAGAAG
OM-R	GGCTCACGTACGCAGCACTAC