

Supplemental Table 1. Primer sequences used for generating POP2 mutants (mutated nucleotides are underlined).

POP2 Mutants	Sequences
POP2 α 1	forward: 5'- CTGGAGCAGCTCAGCT <u>AGG</u> ATGAGTTGAGCAAG -3'
	reverse: 5'- CTTGCTCAACTCATCCTAGCTGAGCTGCTCCAG -3'
POP2 α 1-3	forward: 5'- CAGAGGTAGACAAGGCTAAT <u>TAGA</u> AGCAACTGGTAGAAATCTTC -3'
	reverse: 5'- GAAGATTTCTACCAGTTGCTTCTAATTAGCCTTGTCTACCTCTG -3'
POP2 α 1-4	forward: 5'- CCAGCCACTCCTGCT <u>GAT</u> ACTGGGCAGGGATG -3'
	reverse: 5'- CATCCCTGCCAGTATCAGCAGGAGTGGCTGG -3'
POP2 α 1-5	forward: 5'- GTCTTTGAAAAGATGAAT <u>TAA</u> ACGCATCTGTCTGGGAGAG -3'
	reverse: 5'- CTCTCCAGACAGATGCGTTTAATTCATCTTTTCAAAGAC -3'
POP2 A2V	forward: 5'- GAATTCCCGCGGATGGTATCTTCTGCAGAGCTG -3'
	reverse: 5'- CAGCTCTGCAGAAGATACCATCCGCGGGAATTC -3'
POP2 E6Q	forward: 5'- GGCATCTTCTGCAC <u>AG</u> CTGGACTTCAACCTG -3'
	reverse: 5'- CAGGTTGAAGTCCAGCTGTGCAGAAGATGCC -3'
POP2 L7M	forward: 5'- GCATCTTCTGCAGAGATGGACTTCAACCTGCAG -3'
	reverse: 5'- CTGCAGGTTGAAGTCCATCTCTGCAGAAGATGC -3'
POP2 D8G	forward: 5'- CTTCTGCAGAGCTGGGCTTCAACCTGCAGGCTC -3'
	reverse: 5'- GAGCCTGCAGGTTGAAGCCAGCTCTGCAGAAG -3'
POP2 E16A	forward: 5'- CTGCAGGCTCTTCTGG <u>CG</u> CAGCTCAGCCAGGATG -3'
	reverse: 5'- CATCCTGGCTGAGCTGCGCCAGAAGAGCCTGCAG -3'
POP2 QMG	forward: 5'- GGCATCTTCTGCAC <u>AG</u> ATGGGCTTCAACCTGCAGGCTC -3'
	reverse: 5'- GAGCCTGCAGGTTGAAGCCATCTGTGCAGAAGATGCC -3'

POP2 $\Delta\alpha$ 1:BamH1 after M1: (forward: 5'-GAA TTC CCG CGG ATG gga tcc TCT GCA GAG CTG GAC -3')
(reverse: 5'- GTC CAG CTC TGC AGA GGA TCC CAT CCG CGG GAA TTC -3')MabmH1 after E16: (forward: 5'-CAG GCT CTT CTG GAG gga tcc AGC CAG GAT GAG TTG -3')
(reverse: 5'- CAA CTC ATC CTG GCT GGA TCC CTC CAG AAG AGC CTG -3')