

S5 Table List of primers used in this study

Construct	Forward primers	Reverse Primers
UL50_C35N	5'CGGCCTCATCAATAAAAACC CCAATTACTCGGTGTGC 3'	5' GCATCGGTGACGCGCAGC 3'
UL50_C54S	5'CACGGTCTATAGTGTGAGT ATC 3'	5' TCTGTCTTGAGCATGGCG
UL50_C79S	5' AAACACTGGCTCCGCCGT CTCCC 3'	5' TTAAAGATAAAAACAA GGCACGTGGTCTG 3'
UL53_C214S	5' GCACATCCCAGCGACTGC ATCACG 3'	5' ACGTCGGGGTTTTCGAAG ATGAC 3'
UL53_C159S	5' TTACGGGTTTCAGTAAG AGCAGCGAG 3'	5' TAAAAGTTTCTATTTTT CATGATGTTGGACG 3'
UL53_C288S	5' TCAGGAGCTGAGTCAGTC CAGCGGCC 3'	5' ATGAGCTCTTTGTAGC GCTCAAAGGAC 3'
BAC_UL53- C214S	5' CACATGCACGTCATCTTCGA AAACCCCGACGTGCACATCCC CAGCGACTGCATC TAGGGATAACAGGGTAATCGA TTT 3'	5' GTCTTCGCGCGCCGCCG TGAGCATCTGCGTGATGCAG TCGCTGGGGATGTG GCCAGTGTTACAACCAATTA ACC 3'
BAC_UL53- S214C	5' CACATGCACGTCATCTTCGA AAACCCCGACGTGCACATCCC CTGCGACTGCATCTAGGGATA ACAGGGTAATCGATTT 3'	5'GTCTTCGCGCGCCGCCGTGAGC ATCTGCGTGATGCAGTCGCAGGG GATGTGGCCAGTGTTACAAC CAATTAACC 3'
GST-Myc- UL53 ⁵⁰⁻²⁹²	Introducing Myc sequence (in two consecutive parts of five residues each) into GST- UL53 ⁵⁰⁻²⁹² :	
	Part 1: 5'GGATCCATGGAGCAGAAGTT GATCCCGTCG CCG3'	5' CGGCGACGGGATCAAC TTCTGCTCCATGGATCC 3'
	Part 2: 5'GAAGTTGATCTCGGAGGAGG ACCTGCCGTCGCCG3'	5' CGGCGACGGCAGGTCCT CCTCCGAGATCAACTTC 3'
GST-Myc- G/S linker – UL53 ⁵⁰⁻²⁹²	Introducing a 13 glycine-serine linker sequence into GST-Myc-UL53 ⁵⁰⁻²⁹² in three parts:	

	Part 1: 5'GAGGAGGACCTGGGAGGAG GAGGCCCGTCGCCG3'	5' CGGCGACGGGCCTCCTCC TCCCAGGTCCTCCTC 3'
	Part 2: 5'GGAGGAGGAGGCTCAGGAG GAGGACCGTCGCCG3'	5' CGGCGACGGTCCTCCTCC TGAGCCTCCTCCTCC 3'
	Part 3: 5' GGAGGTGGAGGAGGAGGAG GAGGACCGTCGCCG3'	5' CGGCGACGGTCCTCCTCC TCCTCCTCCACCTCC 3'
His- UL50 ¹⁻¹⁶⁹ E56A	5' GTCTATTGTGTCGCGTATC TACTCAG 3'	5' CTGAGTAGATACGCGACACA ATAGAC 3'
His- M50 ¹⁻¹⁶⁸	Primers for transferring the M50 gene from a previous plasmid to the pET15b vector	
	5'CAGAATGCTGGTCATATGAT GGAGATC 3'	5'CTACGCGTAAGAATTCTCGAC GTC3'
GST-Myc- G/S linker – M53 ¹⁰³⁻³³³	Generating linearized GST-Myc-G/S linker plasmid for InFusion-based cloning	
	5' CCG TCG CCG GCC GAC GCG CGC 3'	5' ACC ACC ACC TGA ACC TCC ACC 3'
	Generating M53 insert for InFusion-based cloning into GST-Myc-G/S linker plasmid	
	5' GGT TCA GGT GGT GGT ATG GCT CCG GAA AG 3'	5' GTC GGC CGG CGA CGG TTA TTA CAG G 3'
GST-Myc- G/S linker – UL30 peptide	Generating UL30 peptide insert for InFusion-based cloning into GST-Myc-G/S linker plasmid	
	5' GGT TCA GGT GGT GGT ATG GAG GAC GTG 3'	5' GTC GGC CGG CGA CGG TTA TTA TGC TAG 3'