

Supplementary Table S4: PCR primers used in this study.

ID	Sequence (5' - 3')	Application
M13_PhD_Insert_F	TTCGCAATTCCTTTAGTGGT	Amplification of surface-displayed 12-mer peptide region in phage M13 genome of phage display-selected pools (Illumina sequencing)
M13_PhD_Insert_R	AAGTTTTGTCGTCTTTCCAG	
T7 seq	GAAATTAATACGACTCACTATAGGG	Amplification of MCS in pET302, sequencing primers (Sanger sequencing)
pET RP	CTAGTTATTGCTCAGCGG	
<i>NdeI</i> _LST_F	TTTCATATGGCAGCAACCCATGAACA T	Amplification of LST from pET302_LST and 5' incorporation of <i>NdeI</i> restriction site
LST_ <i>SacI</i> _SERSQ_ <i>BamHI</i> _R	GCCGGATCCTTAGGTACGTGTGCTC GGAATATACTGGCTACGTTCTGAGAG CTCTTTGATGGTGCCCCACAGAA	Amplification of LST from pET302_LST and 3' incorporation of CPHP and <i>BamHI</i> restriction site
LST_ <i>SacI</i> _QTVNL_ <i>BamHI</i> _R	GCCGGATCCTTAGCTACGACGAACAT CACTCAGCAGATTAACGGTCTGGAG CTCTTTGATGGTGCCCCACAGAA	
LST_ <i>SacI</i> _DGSPL_ <i>BamHI</i> _R	GCCGGATCCTTAGCTCGGATGAATTT TCTGCGGCAGCGACTGCCATCGAG CTCTTTGATGGTGCCCCACAGAA	
LST_ <i>SacI</i> _YNTGH_ <i>BamHI</i> _R	GCCGGATCCTTAGGTGTGCAGTTTAA CCGGTGTATGACCTGTATTATAGAGC TCTTTGATGGTGCCCCACAGAA	
LST_ <i>SacI</i> _HGDWT_ <i>BamHI</i> _R	GCCGGATCCTTATGCCAGAAACCAG CTACGTTTGGTCCAATCACCATGGAG CTCTTTGATGGTGCCCCACAGAA	
LST_ <i>SacI</i> _GYPPG_ <i>BamHI</i> _R	GCCGGATCCTTACAGGGTATTTGCAT GACCTGCACCAGGCGGATAACCGAG CTCTTTGATGGTGCCCCACAGAA	
LST_ <i>SacI</i> _TPLFT_ <i>BamHI</i> _R	GCCGGATCCTTAATTTGCGCCTGTTG CTTCTTGGGTAACAGCGGTGTGAG CTCTTTGATGGTGCCCCACAGAA	
LST_ <i>SacI</i> _MTPTA_ <i>BamHI</i> _R	GCCGGATCCTTAATTACAACGAACAC AGGTATTTGCGGTGCGGGTCATGAG CTCTTTGATGGTGCCCCACAGAA	
LST_ <i>SacI</i> _LSWSQ_ <i>BamHI</i> _R	GCCGGATCCTTAGGTGCTGCTAACA CCCTGGGTCTGTGACCAGCTCAGGA GCTCTTTGATGGTGCCCCACAGAA	
LST_ <i>SacI</i> _SIAED_ <i>BamHI</i> _R	GCCGGATCCTTATTTGCGGGTGCTAA TGGTCTGATCTTCTGCAATTGAGAGC TCTTTGATGGTGCCCCACAGAA	
LST_ <i>SacI</i> _SDSSD_ <i>BamHI</i> _R	GCCGGATCCTTAATCACTGCTATCGC TGAGCTCTTTGATGGTGCCCCACAGA A	

Abbreviations: CPHP, cell-penetrating homing peptide; F, forward primer; MCS, multiple cloning site; R, reverse primer.