

**Supplemental Table S1. The sequences of the primers used in the DNA construction.**

Constructs	DNA sequence
SPN48 (residues 17 – 389)	5' -CCCCATATGGAAGATGCGACTTTGCAAGA- 3' 5' -CCCAAGCTTTCAATTCAATGTTGTGACTCGT- 3'
SPN48 (E353K) internal primers	5' -GTTATTTTACCAAAGATGGCACT- 3' 5' -AGTGCCATCTTTGGTAAAATAAC- 3'
SPN48 4KA (K293A/K294A/K297A/K298A) internal primers	5' -TTCGCGGCAGTGTTGGCGGCATTAGGGGTGAAGAAAGCG- 3' 5' -CCCTAATGCCGCCAACACTGCCGCGAAGTCAACAGTAC- 3'
SPN48 RCL (residues 336 – 361)	5' -GGGGGATCCGAAGAGGGTGTAGAGGCC- 3' 5' -GGGGAATTCCCTTAGGACTGTCCGGAAG- 3'
SPE clip domain (residues 19 – 84)	5' -TTTGAATTCTTGACCCCTGCCGAAGCCCGA- 3' 5' -TTTCTCGAGCACATTGTTGAACTCTGGGGGCCCGTC- 3'
SPE serine protease domain (residues 85 – 385)	5' -CCCGAATTCCCATCAAACCCCAATAGTGGAC- 3' 5' -TAACTCGAGCTAGGGCTTCAGCTTGCCGACG- 3'