

Sensorgrams obtained for each replicate of peptide  $8 / Phd_{STm}^{52-73} M60A$  (analyte) binding to  $Doc_{STm}$  (ligand). Six concentrations of the analyte were flown over the surface in a single cycle, ranging from 100 nM to 0.412 nM (3-fold dilutions). The association and dissociation times were 80 s and 1000 s, respectively.

Summary of the fitted parameters obtained from each SPR measurement of peptide 8.

Replicate	kon (M-1 s-1)	k <sub>off</sub> (s <sup>-1</sup> )	K <sub>D</sub> (pM)	R <sub>MAX</sub> (RU)	tc (RU M <sup>-1</sup> s <sup>-1</sup> )	Chi <sup>2</sup> (RU <sup>2</sup> )	U-value
1	$1.442 \pm 0.002 \times 10^6$	$9.658 \pm 0.008 \times 10^{-4}$	670	$33.6 \pm 0.01$	$1.566 \pm 1.000 \times 10^{13}$	0.275	1
2	$1.490 \pm 0.003 \times 10^6$	$9.101 \pm 0.010 \times 10^{-4}$	611	$33.5 \pm 0.01$	$3.717 \pm 4.600 \times 10^{13}$	0.418	1
3	$3.730 \pm 0.016 \times 10^6$	$18.10 \pm 0.06 \times 10^{-4}$	485	$26.3 \pm 0.01$	$8.970 \pm 0.178 \times 10^7$	0.248	1