

Sensorgrams obtained for each replicate of peptide 20 / Phd<sub>STm</sub> <sup>52-71</sup> (analyte) binding to Doc<sub>STm</sub> (ligand). Six concentrations of the analyte were flown over the surface in a single cycle, ranging from 50 nM to 0.206 nM (3-fold dilutions). The association and dissociation times were 80 s and 1200 s, respectively.

Summary of the fitted parameters obtained from each SPR measurement of peptide 20.

Replicate	kon (M-1 s-1)	k <sub>off</sub> (s <sup>-1</sup> )	K <sub>D</sub> (pM)	R <sub>MAX</sub> (RU)	t <sub>C</sub> (RU M <sup>-1</sup> s <sup>-1</sup> )	Chi <sup>2</sup> (RU <sup>2</sup> )	U-value
1	$9.247 \pm 0.016 \times 10^5$	$4.132 \pm 0.006 \times 10^{-4}$	447	$22.0 \pm 0.01$	$4.539 \pm 8.000 \times 10^{12}$	0.166	1
2	$9.339 \pm 0.014 \times 10^5$	$3.870 \pm 0.006 \times 10^{-4}$	414	$23.4 \pm 0.01$	$5.672 \pm 2.800 \times 10^{11}$	0.165	1
3	$8.910 \pm 0.014 \times 10^5$	$3.778 \pm 0.006 \times 10^{-4}$	424	$24.5 \pm 0.01$	$8.001 \pm 11.000 \times 10^{12}$	0.164	1