



Sensorgrams obtained for each replicate of peptide **12** / Phd<sub>STm</sub><sup>52-73</sup> N65A (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). In all replicates the association time was 80s. The dissociation times were 1300 s for replicates 1 and 2, and 1200 s for replicates 3 and 4.

Summary of the fitted parameters obtained from each SPR measurement of peptide **12**.

Replicate	$k_{on}$ ( $M^{-1} s^{-1}$ )	$k_{off}$ ( $s^{-1}$ )	$K_D$ (pM)	$R_{MAX}$ (RU)	$t_c$ ( $RU M^{-1} s^{-1}$ )	$\chi^2$ (RU <sup>2</sup> )	U-value
<b>1</b>	$1.259 \pm 0.002 \times 10^6$	$3.155 \pm 0.005 \times 10^{-4}$	251	$33.5 \pm 0.01$	$7.047 \pm 1.700 \times 10^{12}$	0.338	1
<b>2</b>	$1.595 \pm 0.003 \times 10^6$	$2.643 \pm 0.005 \times 10^{-4}$	166	$29.7 \pm 0.01$	$4.890 \pm 1.900 \times 10^{12}$	0.311	1
<b>3</b>	$1.290 \pm 0.004 \times 10^6$	$1.100 \pm 0.003 \times 10^{-4}$	85.3	$27.6 \pm 0.01$	$2.410 \pm 0.026 \times 10^7$	0.077	2
<b>4</b>	$1.440 \pm 0.004 \times 10^6$	$1.200 \pm 0.002 \times 10^{-4}$	83.3	$25.9 \pm 0.01$	$1.360 \pm 0.006 \times 10^7$	0.032	1