



Sensorgrams obtained for each replicate of peptide **18** / Phd<sub>STm</sub><sup>52-73</sup> D72A (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 1000 s for replicates 1 and 2 and 1200 s for replicate 3.

Summary of the fitted parameters obtained from each SPR measurement of peptide **18**.

Replicate	$k_{on}$ ( $M^{-1} s^{-1}$ )	$k_{off}$ ( $s^{-1}$ )	$K_D$ (pM)	$R_{MAX}$ (RU)	$t_c$ ( $RU M^{-1} s^{-1}$ )	$\chi^2$ ( $RU^2$ )	U-value
1	$1.397 \pm 0.002 \times 10^6$	$0.7430 \pm 0.0069 \times 10^{-4}$	53.2	$35.7 \pm 0.01$	$1.189 \pm 1.800 \times 10^{15}$	0.506	5
2	$3.007 \pm 0.005 \times 10^6$	$0.5670 \pm 0.0066 \times 10^{-4}$	18.9	$24.7 \pm 0.01$	$7.652 \pm 15.000 \times 10^{12}$	0.245	7
3	$3.120 \pm 0.003 \times 10^6$	$1.200 \pm 0.003 \times 10^{-4}$	38.5	$30.2 \pm 0.01$	$5.850 \pm 5.030 \times 10^{13}$	0.142	2