



Sensorgrams obtained for each replicate of peptide **17** / Phd<sub>STm</sub><sup>52-73</sup> L70A (analyte) binding to Doc<sub>STm</sub> (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). In all replicates the association time was 80s. The dissociation times were 1000 s for replicates 1 and 2 and 400 s for replicate 3.

Summary of the fitted parameters obtained from each SPR measurement of peptide **17**.

Replicate	$k_{on}$ ( $M^{-1} s^{-1}$ )	$k_{off}$ ( $s^{-1}$ )	$K_D$ (nM)	$R_{MAX}$ (RU)	$t_c$ ( $RU M^{-1} s^{-1}$ )	$\chi^2$ (RU <sup>2</sup> )	U-value
1	$2.873 \pm 0.027 \times 10^6$	$6.019 \pm 0.059 \times 10^{-3}$	2.10	$28.4 \pm 0.04$	$1.078 \pm 0.008 \times 10^7$	0.464	2
2	$3.197 \pm 0.035 \times 10^6$	$6.343 \pm 0.075 \times 10^{-3}$	1.98	$30.3 \pm 0.04$	$1.034 \pm 0.008 \times 10^7$	0.584	2
3	$5.440 \pm 0.089 \times 10^6$	$5.540 \pm 0.079 \times 10^{-3}$	1.02	$23.2 \pm 0.04$	$2.390 \pm 0.044 \times 10^7$	0.730	3