



Sensorgrams obtained for each replicate of peptide **6** / Phd<sub>STM</sub><sup>52-73</sup> F56A (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 **6**.

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
1	$7.135 \pm 0.010 \times 10^5$	$7.167 \pm 0.008 \times 10^{-4}$	1000	$34.1 \pm 0.01$	$1.322 \pm 0.850 \times 10^{13}$	0.285	1
2	$7.641 \pm 0.010 \times 10^5$	$7.021 \pm 0.007 \times 10^{-4}$	919	$35.8 \pm 0.01$	$5.990 \pm 3.730 \times 10^{10}$	0.257	1
3	$14.90 \pm 0.03 \times 10^5$	$11.10 \pm 0.03 \times 10^{-4}$	745	$27.6 \pm 0.01$	$2.910 \pm 2.760 \times 10^{13}$	0.237	1