



Sensorgrams obtained for each replicate of peptide **5** / Phd<sub>STM</sub><sup>52-73</sup> E55A (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) for replicates 1 and 2, and 50 nM to 0.206 nM (3-fold dilutions) for replicate 3. The association and dissociation times were 80 s and 1000 s, respectively.

Summary of the fitted parameters obtained from each SPR measurement of peptide **5**.

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
<b>1</b>	$1.453 \pm 0.003 \times 10^6$	$7.105 \pm 0.084 \times 10^{-5}$	48.9	$46.6 \pm 0.02$	$1.410 \pm 3.800 \times 10^{13}$	1.390	7
<b>2</b>	$1.461 \pm 0.003 \times 10^6$	$7.493 \pm 0.082 \times 10^{-5}$	51.3	$47.4 \pm 0.02$	$7.999 \pm 8.400 \times 10^{12}$	1.370	7
<b>3</b>	$1.711 \pm 0.003 \times 10^6$	$8.018 \pm 0.068 \times 10^{-5}$	46.9	$40.1 \pm 0.02$	$3.497 \pm 88.00 \times 10^{13}$	0.627	5