



Sensorgrams obtained for each replicate of peptide **15** / Phd<sub>STm</sub><sup>52-73</sup> R68A (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 replicate 1 and 2, and 1200 s for replicate 3.

Summary of the fitted parameters obtained from each SPR measurement of peptide **15**.

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	$1.951 \pm 0.003 \times 10^6$	$2.436 \pm 0.005 \times 10^{-4}$	124	$27.6 \pm 0.01$	$6.39 \pm 22.00 \times 10^{12}$	0.245	1
2	$1.566 \pm 0.002 \times 10^6$	$1.662 \pm 0.004 \times 10^{-4}$	106	$20.8 \pm 0.01$	$8.020 \pm 2.600 \times 10^{12}$	0.118	2
3	$1.290 \pm 0.004 \times 10^6$	$1.440 \pm 0.003 \times 10^{-4}$	112	$26.1 \pm 0.01$	$2.240 \pm 0.024 \times 10^7$	0.073	1