

Sensorgrams obtained for each replicate of peptide 1 / PhdSTm52-73 (analyte) binding to DocSTm (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). The association and dissociation times were 80 s and 1000 s, respectively.

Summary of the fitted parameters obtained from each SPR measurement of peptide 1.

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **Replicate** | **kon (M-1 s-1)** | **koff (s-1)** | **KD (pM)** | **RMAX (RU)** | **tC (RU M-1 s-1)** | **Chi2 (RU2)** | **U-value** |
| **1** | 1.056 ± 0.001 × 106 | 7.750 ± 0.040 × 10-5 | 73.4 | 39.20 ± 0.01 | 1.694 ± 15.000 × 1013 | 0.195 | 3 |
| **2** | 1.065 ± 0.001 × 106 | 8.926 ± 0.054 × 10-5 | 83.8 | 40.20 ± 0.01 | 2.540 ± 1.100 × 1011 | 0.371 | 3 |
| **3** | 1.610 ± 0.002 × 106 | 9.520 ± 0.047 × 10-5 | 59.1 | 29.40 ± 0.01 | 1.670 ± 11.200 × 1013 | 0.157 | 3 |
| **4** | 1.270 ± 0.002 × 106 | 10.40 ± 0.040 × 10-5 | 81.9 | 29.50 ± 0.01 | 2.430 ± 0.986 × 109 | 0.113 | 2 |