**Supplementary file 3:** Poly (GT) repeats binding capacity (N), apparent dissociation constant (*K*D), and thermodynamic parameters for RRM fragments of TDP-43, as determined by ITC. *a* and *b* correspond to apparent dissociation constants *K*D1 and *K*D2, respectively. The thermodynamic parameters (ΔH, TΔS, ΔG) and χ2 values were expressed in kcal/mol and (kcal/mol)2, respectively.

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **Protein** | **Poly (GT) repeats** | **N** | **KD (M)** | **ΔH** | **TΔS** | **ΔG** | **χ2** |
| **RRM1-2** | **(GT)3** | 1.70 ± 2.4e-2 | 2.2e-6 ± 177e-9 | -16.7 ± 0.413 | -9.00 | -7.71 | 0.036 |
| **(GT)6** | 0.99 ± 4.1e-3 | 68.4e-9 ± 8.68e-9 | -29.8 ± 0.345 | -20.00 | -9.78 | 0.509 |
| **(GT)12** | 0.40 ± 1.9e-3 | **a** 51.0e-9 ± 1.20e-10  **b** 0.4e-9 ± 5.34e-12 | -14.8 ± 0.781  -76.4 ± 0.785 | -4.86  -63.60 | -9.95  -12.80 | 2.14 |
| **RRM1** | **(GT)3** | 0.82 ± 0.6e-3 | 929.0e-9 ± 56.2e-9 | -18.5 ± 0.262 | -10.20 | -8.23 | 0.040 |
| **(GT)6** | 0.39 ± 6.2e-4 | **a** 84.4e-9 ± 1.81e-10  **b** 9.4e-9 ± 7.87e-11 | -9.9 ± 0.163  -40.4 ± 0.182 | -0.23  -29.50 | -9.65  -10.90 | 0.075 |
| **(GT)12** | 0.24 ± 1.2e-3 | **a** 2.3e-6 ± 2.31e-6  **b** 54.2e-9 ± 4.11e-10 | -14.7 ± 0.569  -78.0 ± 0.321 | -7.03  -68.10 | -7.69  -9.91 | 0.391 |
| **RRM2** | **(GT)3** | 0.76 ± 6.3e-3 | 679.0e-9 ± 47.4e-9 | -16.5 ± 0.250 | -8.04 | -8.42 | 0.046 |
| **(GT)6** | 0.30 ± 4.2e-3 | **a** 31.6e-9 ± 2.56e-9  **b** 601e-9 ± 6.46e-9 | -28.8 ± 0.202  -15.9 ± 0.191 | -18.60  -7.38 | -10.20  -8.49 | 0.021 |
| **(GT)12** | 0.24 ± 4.6e-3 | **a** 347.0e-9 ± 8.58e-9  **b** 5.28e-6 ± 45.5e-9 | -79.9 ± 1.140  -0.17 ± 0.637 | -71.10  -7.03 | -8.81  -7.20 | 0.505 |