



ATW0067

APTAMER INFORMATION

Tenofovir

Description:

- Identifiers: TFV G2:125:256 11.85 BTVM1
- Number of DNA nucleotides: 32 bases
- Target for selection: Tenofovir (TFV), provided by customer (<http://en.wikipedia.org/wiki/Tenofovir>)

Aptamer was proudly selected at Base Pair by M.S. from a randomized 32-mer DNA library against TFV. Proprietary methods were then used to select the aptamer.

Aptamer folding instruction before use:

Once the aptamer is in its working concentration, it needs to be heated to 85-90 °C for 2 minutes, and then cooled to room temperature before use.

Validation data with TFV by Back-Scattering Interferometry (BSI) method:

- Buffer used for validation: 1X PBS, pH = 7.4, 1 mM MgCl₂
- Average K_d = 9.0 ± 1.4 nM

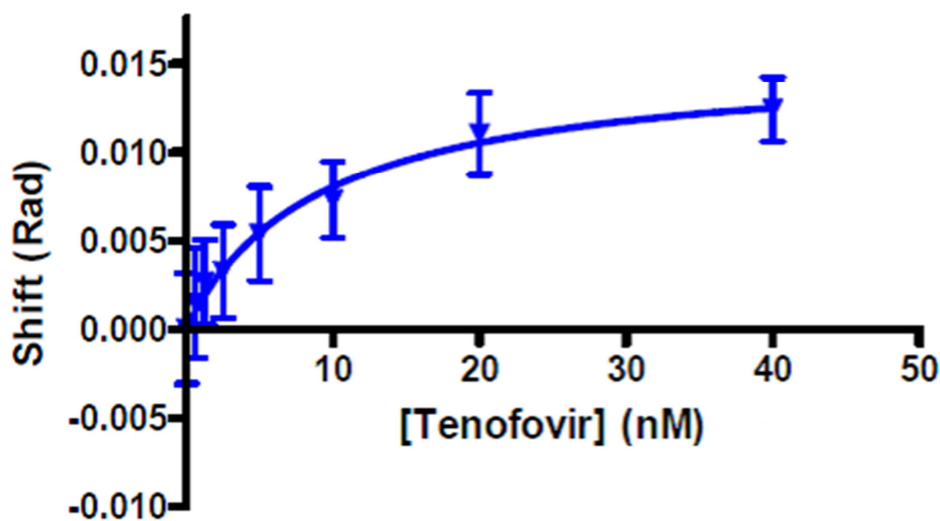


Figure 1. Aptamer-TFV binding. The shift in the spatial position of the fringes is plotted versus the titrated TFV concentration. The values are the mean values from three independent measurements

Validation data with TFV by Microscale Thermophoresis (MST) method:

- Buffer used for validation: 1X PBS, pH = 7.4, 1 mM MgCl₂
- Average K_d = 1 nM



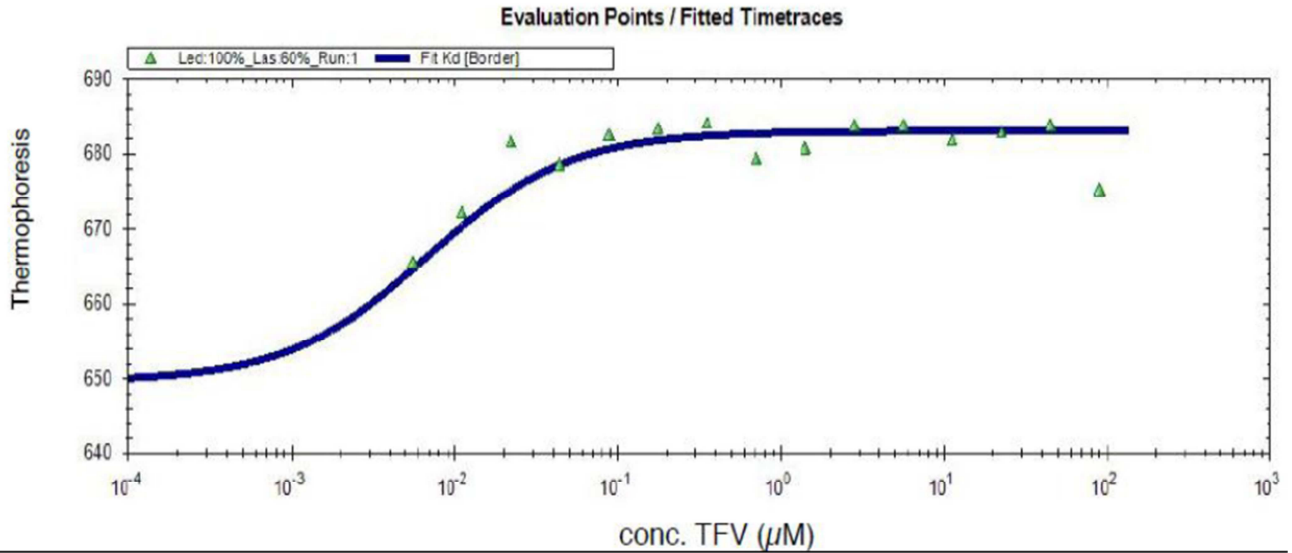


Figure 1. Aptamer-TFV binding. The thermophoresis is plotted versus the titrated TFV concentration.

Note that the discrepancy in K_d values may be due to working mechanisms of the two analysis techniques.

