

APTAMER INFORMATION

TNT aptamer_2697

a. Description:

- Identifiers: TNT_2697
- Number of RNA nucleotides: 32 bases
- Target for selection: 2, 4, 6-Trinitrotoluene (Cerilliant Corporation, Cat# ERT-022S)

Aptamer was proudly selected at Base Pair by M.S. from a randomized 32-mer RNA library against 2, 4, 6-Trinitrotoluene. 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.

1b. Validation data with 2, 4, 6-Trinitrotoluene by MST (Microscale Thermophoresis) method:

- Buffer used for validation: 1X PBS, pH = 7.4, 1 mM MgCl₂
- Average K_d = 5.7 ± 2.1 nM

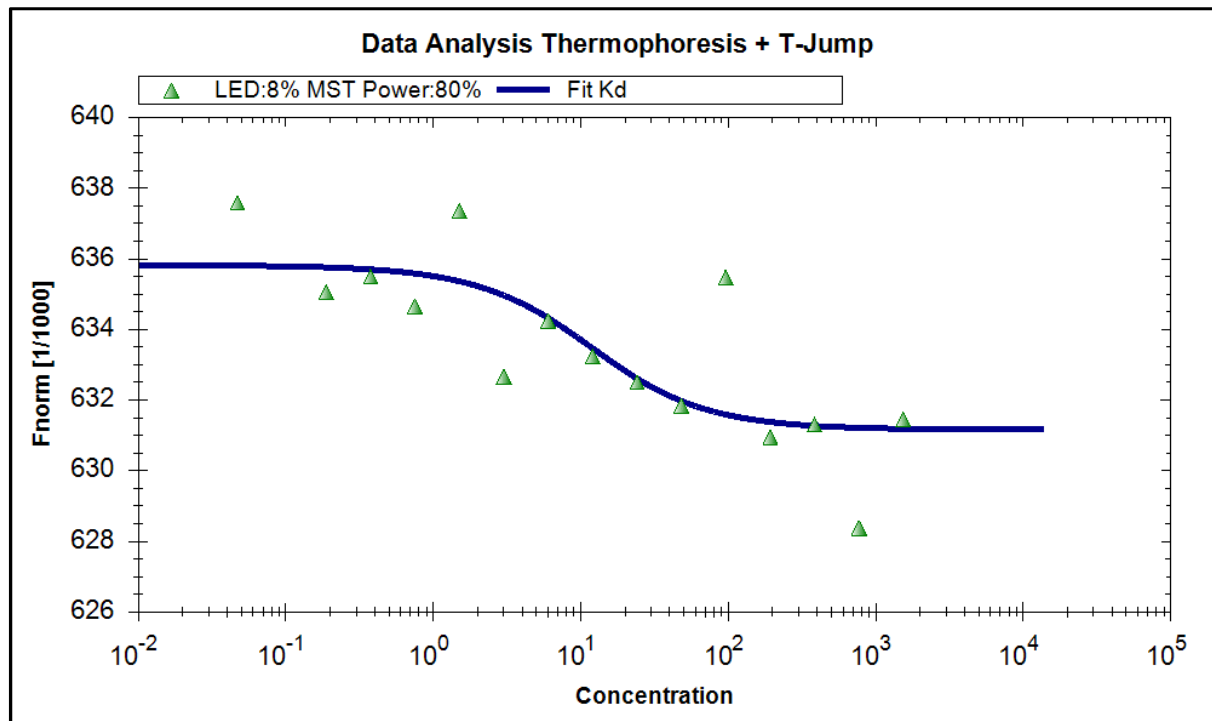


Figure 1. Aptamer-TNT binding. The thermophoresis is plotted versus the titrated 2, 4, 6-Trinitrotoluene concentration.