

## ATW0041

Aptamer to p24 HIV-1 Protein

### Selection Information

**Target for Selection:** Recombinant HIV-1 p24 gag his-tag protein, ProSpec Cat# HIV-149

**Number of DNA Nucleotides:** 32

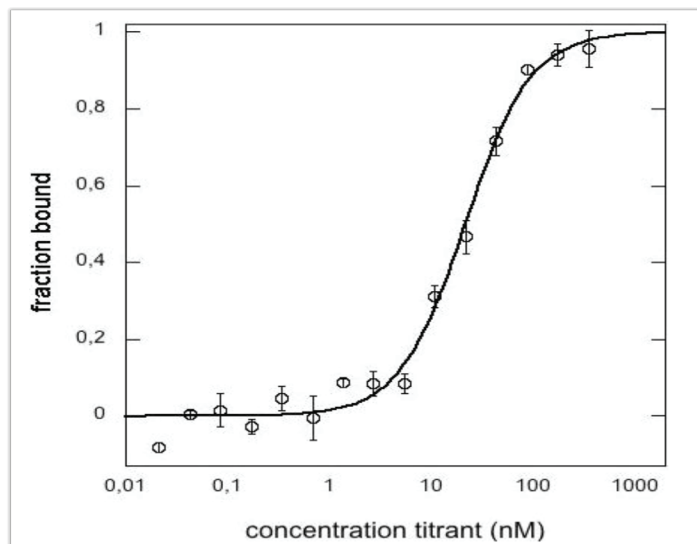
Aptamers were selected from a randomized Base Pair 32-mer DNA library against the target protein. Proprietary methods were used to select this specific aptamer sequence.

### Affinity Determination

**Affinity Determination Method:** Microscale Thermophoresis analysis (MST)

**Buffer Used for Affinity Determination:** 1 x PBS, 1mM MgCl<sub>2</sub>, 0.05% Tween 20, pH 7.4

**Average kD:** 22.0 ± 2.7 nM



**Figure 1. Aptamer-p24 Binding**

The fraction of bound aptamer is plotted versus the titrated target concentration,  $R^2 = 0.990$

### Aptamer Folding

For optimal binding, aptamers must be folded into their tertiary structure prior to use. Once the aptamer is at its working concentration, heat to 90-95°C for 5 minutes, then cool to room temperature (~15 minutes)

*For Research Use Only*