

## ATW0014

Aptamer to Human hCG

### Selection Information

**Target for Selection:** Human chorionic gonadotropin (hCG) protein, Sigma # C1063

**Number of DNA Nucleotides:** 40

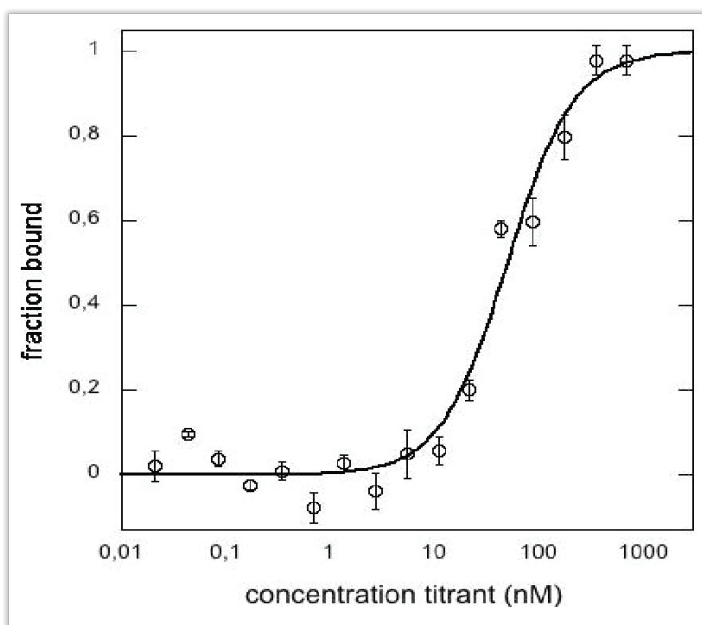
Aptamers were selected from a randomized Base Pair 40-mer DNA library against the target protein. Proprietary methods were used to select this specific aptamer sequence.

### Affinity Determination

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

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

**Average kD:** 50.9 ± 9.7 nM



**Figure 1. Aptamer-hCG Binding**

The fraction of bound aptamer is plotted versus the titrated target concentration,  $R^2 = 0.975$

### 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)

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