

## ATW0059

Aptamer to mCherry

### Selection Information

**Target for Selection:** Recombinant mCherry fluorescent protein, Biovision Cat# 4993-100

**Number of DNA Nucleotides:** 70 (with primer regions)

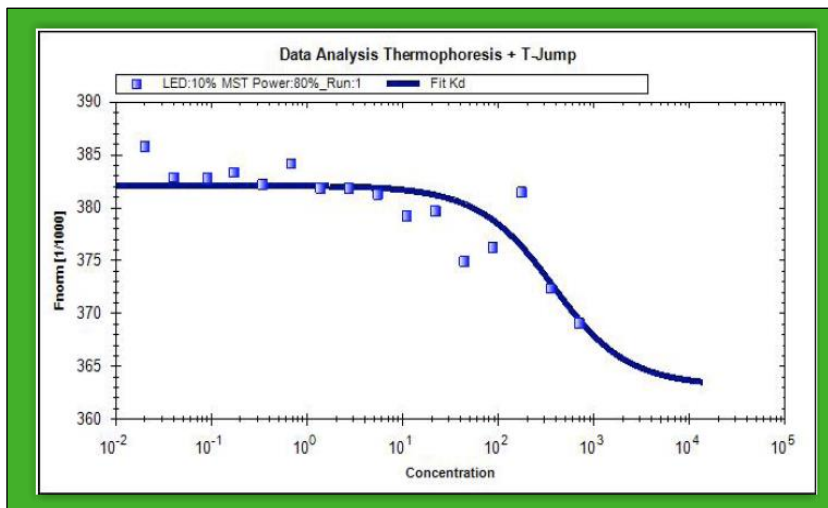
Aptamers were selected from a randomized Base Pair 32-mer DNA library against the target molecule. Proprietary methods were used to select this specific aptamer sequence.

### Affinity Determination

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

**Buffer Used for Affinity Determination:** 1X PBS, pH 7.4, 1 mM MgCl<sub>2</sub>

**Average K<sub>D</sub>:** 264 ± 56 nM



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

### Aptamer Folding and Dilution

For optimal binding, aptamers must be folded into their tertiary structure prior to use. Dilute to 10x working concentration in Folding Buffer, heat to 90-95°C for 5 minutes, then cool to room temperature (~15 minutes). Final application buffers used for dilution of aptamer to working concentration and washing should be a pH of ~7.4 and contain 1 mM MgCl<sub>2</sub>.