BasePair Biotechnologies, Inc.

HSA Aptamer Data Sheet

ATW0086

Aptamer to Human Serum Albumin

Selection Information

Target for Selection: Human Serum Albumin (HSA), Sigma Cat# A9511

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 $MgCl_2$, 0.05% Tween 20, pH 7.4

Average K_D: 190.6 ± 52.8 nM

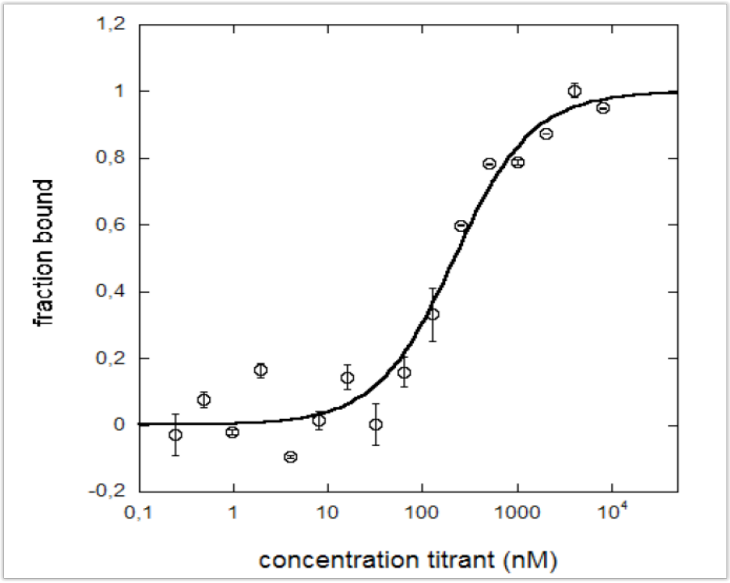

Figure 1. Aptamer-HSA Binding

The fraction of bound aptamer is plotted versus the titrated target concentration, $R^2 = 0.965$

Aptamer Folding

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 contain 1 mM MgCl2.