

ATW0081

Aptamer to Human CD45

Selection Information

Target for Selection: Recombinant human CD45 extracellular domain (aa 24-575) expressed in a human cell line, PlexBio Cat# 90043-50

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 MgCl₂, 0.05% Tween 20, pH 7.4

Average K_d: 8.7 nM

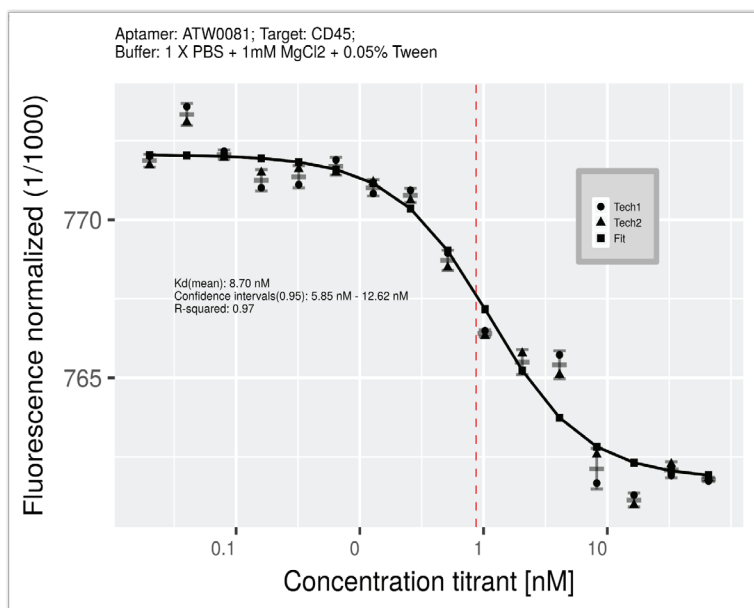


Figure 1. Aptamer-CD45 Binding

The fraction of bound aptamer is plotted versus the titrated target concentration, R²=0.97.

Aptamer Folding

For optimal binding, aptamers must be folded into their tertiary structure prior to use. Dilute to 10x - 100x working concentration in Folding Buffer, heat to 90-95°C for 5 minutes, then cool to room temperature (~15 minutes)