

## ATW0032

Aptamer to PBP2a

### Selection Information

**Target for Selection:** Recombinant *Staphylococcus aureus* Penicillin-binding protein 2a, PBP2a, Ray Biotech Cat# 230-00051

**Number of DNA Nucleotides:** 70 (with primers)

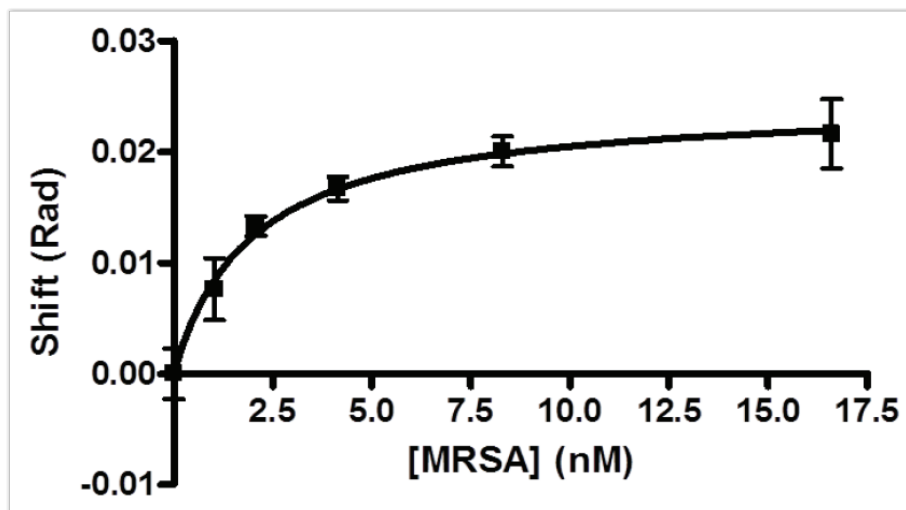
Aptamers were selected from a randomized Base Pair 32-mer DNA library against the target protein. Proprietary methods were used to select this specific aptamer sequence.

### Affinity Determination

**Affinity Determination Method:** Back-Scattering Interferometry (BSI)

**Buffer Used for Affinity Determination:** 1 x PBS, 1mM MgCl<sub>2</sub>, in nuclease-free water, pH 7.4

**Average kD:** 1.96 ± 0.20 nM



**Figure 1. Aptamer-MRSA Binding**

The BSI response is plotted versus the titrated target concentration of methicillin-resistant *S. aureus* (MRSA). The values are the mean values from three independent measurements.

### 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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