



**ATW0001**

## APTAMER INFORMATION

### Ampicillin

#### Description:

- Identifiers: Ampicillin aptamer 5E01 #284
- Number of DNA nucleotides: 40 bases
- Molecular Weight: 12,239 g/mol
- Target for selection: Ampicillin sodium salt (US Biological Cat# A2260)

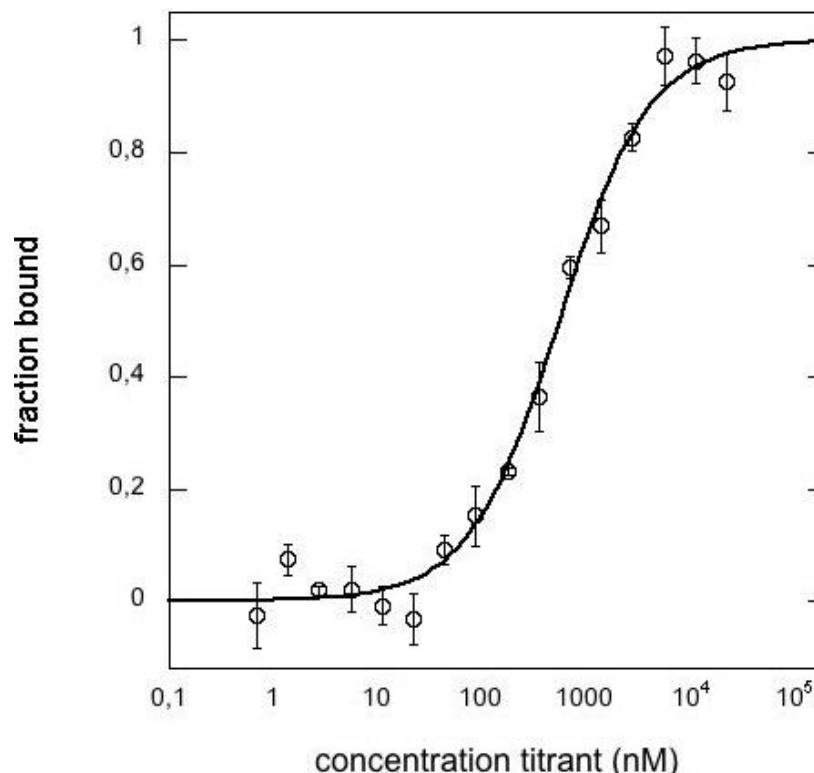
Aptamer was selected at Base Pair Biotechnologies from a randomized 40-mer DNA library against the target protein. Proprietary methods were then used to select the aptamer.

#### Aptamer folding instruction before use:

Once the aptamer is in its working concentration, it needs to be heated to 85-95 °C for 5 minutes, and then cooled to room temperature (~15 minutes) before use.

#### Validation data by Microscale Thermophoresis (MST) analysis:

- Buffer used for validation: 1X PBS, pH = 7.4, 1 mM MgCl<sub>2</sub>, 0.05% Tween
- Average  $K_d$ :  $596.8 \pm 76.2$  nM



**Figure 1.** Aptamer-Ampicillin binding. The fraction of bound aptamer is plotted versus the titrated target concentration,  $R^2 = 0.990$ .

