

ATW0066

APTAMER INFORMATION

Epinephrine/Norepinephrine 293-932c

Description:

- Identifiers: Epi/Norep 293-932c
- Number of DNA nucleotides: 32 bases
- Target for selection: Epinephrine (Sigma Cat #E4642) and Norepinephrine (Sigma Cat #A7256)

Aptamer was selected at Base Pair Biotechnologies from a randomized 32-mer DNA library against 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 with Epinephrine by Microscale Thernophoresis (MST) analysis:

- Buffer used for validation: 1X PBS, pH = 7.4, 1 mM MgCl₂, 0.05% Tween
- Average K_d: 620.1 ± 132.2 nM

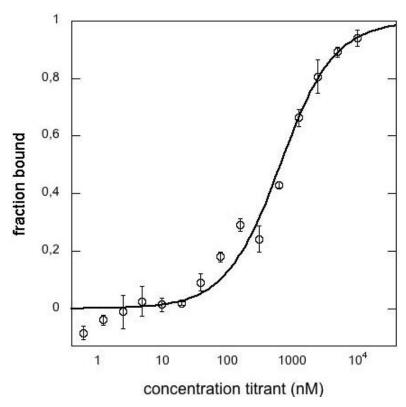


Figure 1. Aptamer-Epinephrine. The fraction of bound aptamer is plotted versus the titrated target concentration, $R^2 = 0.979$.





Validation data with Norepinephrine by Microscale Thernophoresis (MST) analysis:

- Buffer used for validation: 1X PBS, pH = 7.4, 1 mM MgCl₂, 0.05% Tween
- Average K_d: 666.86 ± 200.2 nM

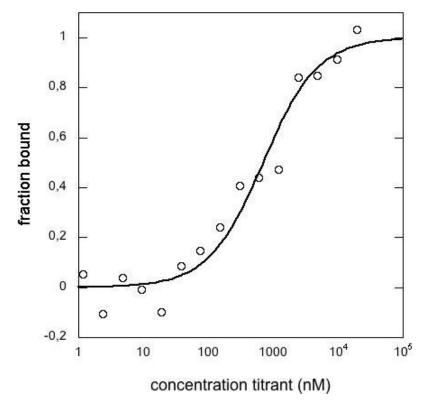


Figure 1. Aptamer-Norepinephrine. The fraction of bound aptamer is plotted versus the titrated target concentration, $R^2 = 0.958$.

