

Gator[®] SMAP Sensitivity: The Power of Next Generation BLI

Gator Bio's SMAP (Small Molecule Analysis Probes; PN: 160011) probe is a streptavidin-based sensor for high-capacity immobilization of biotinylated proteins to study the binding interaction with small molecule ligands. It is valuable for the kinetic analysis of small molecules and peptides against biotinylated proteins ranging from 30 - 150 kDa. SMAP has fundamental physical and chemical design elements that provide much higher sensitivity to small molecule analytes as compared to the first generation BLI. This probe can be used for the analysis of small molecules down to 150 Da, as well as larger biomolecules and antibodies.

PRODUCT INFORMATION

Part Number

160011

Includes

SMAP probes (96 probes/tray)

PERFORMANCE SUMMARY

Assay Run Time

Ligand dependent

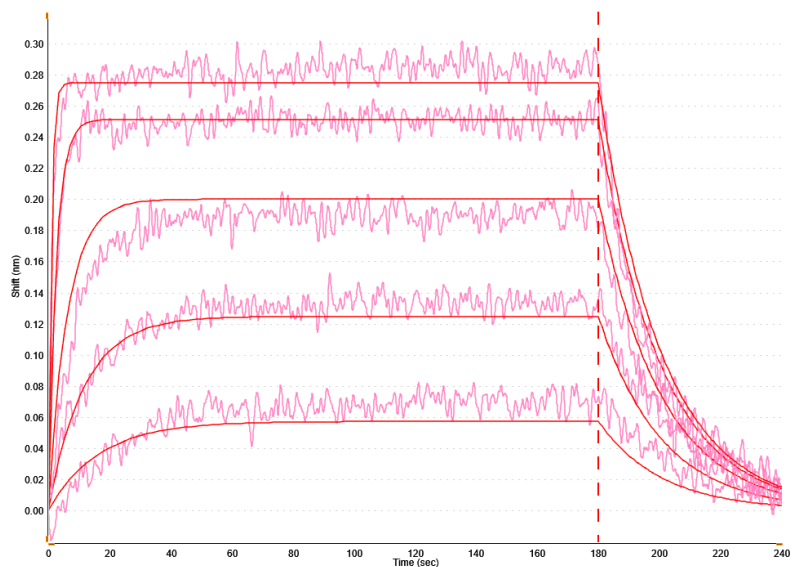
Crude Sample Tolerant

Yes

KEY BENEFITS

- Compatible with small molecules down to 150 Da
- Higher signal compared to First Generation BLI

KINETIC PERFORMANCE



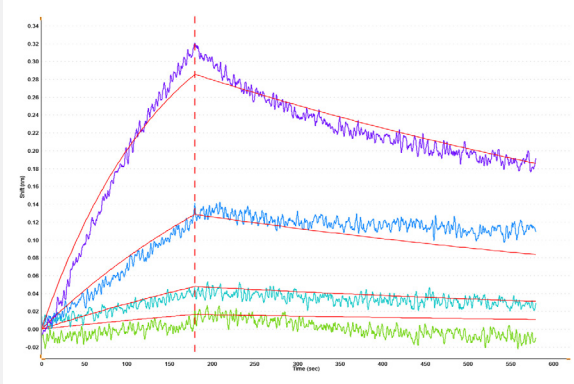
	Gator	Biacore
k_{off} (1/s)	4.86E - 02	4.96E - 02
k_{on} (1/Ms)	1.00E + 05	9.66E + 04
K_D (M)	4.85E - 07	5.13E - 07

Global-fit analysis using Gator[®] software for 0.12 to 10 μ M furosemide (MW 330 Da) binding interaction with bovine carbonic anhydrase II. K_D = 485 nM (R^2 = 0.98).

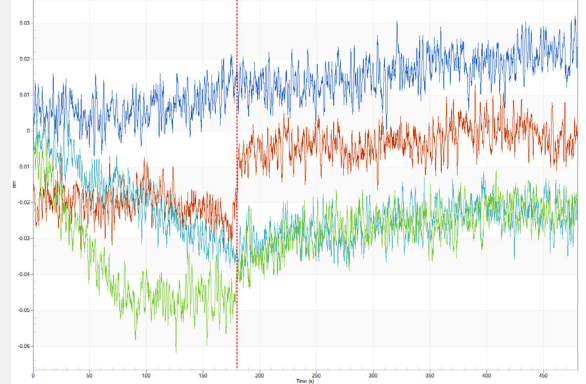


COMPARISON WITH COMPETITOR BLI

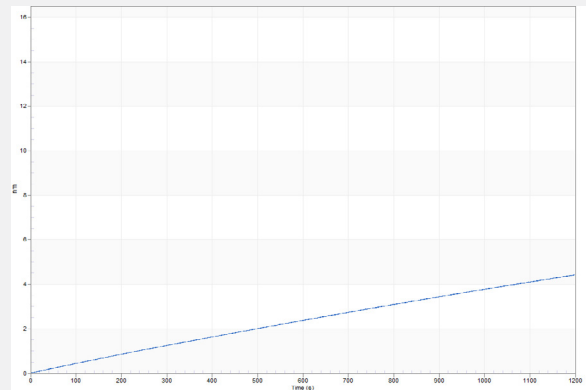
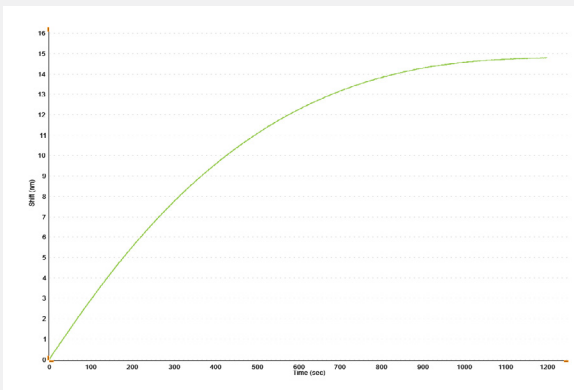
Gator® SMAP



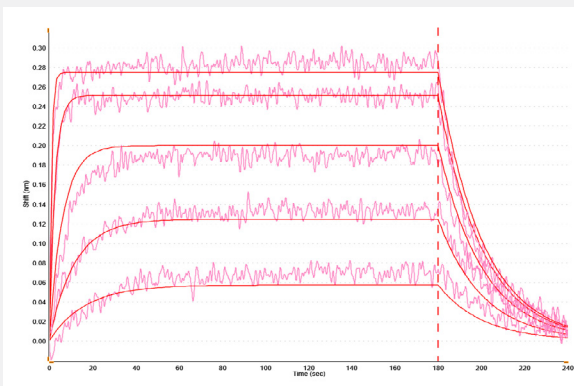
Competitor BLI



Comparison of fluorescein (332 Da) binding onto anti-fluorescein loaded Gator® SMAP vs competitor BLI.



Comparison of loading signal for a 53 kDa protein on Gator® SMAP vs competitor BLI.



Comparison of furosemide (330 Da) binding onto carbonic anhydrase loaded Gator® SMAP vs competitor BLI.

