

Gator Bio Label-free Analysis with next-generation Biolayer Interferometry Systems



Looking for innovations

in label-free analysis of biomolecular interactions?



SPECIFICATIONS

	GatorPrime	GatorPlus	GatorPro
Detection technology	Biolayer Interferometry		
Analysis types	Quantitation, Yes/No Binding, Kinetics, Affinity, Epitope binning		
Sample types	Proteins, Antibodies, Peptides, Nucleid Acids, Liposomes, Small Molecules, AAV		
Number of Channels	8		32
Data Aquisition rate	2, 5, 10 Hz		
Plate format	1 x 96-well plate & 1 x 96-well max plate	1 x 96- or 384-well & 1 x 96-well max plate	3 x 96- or 384-well plates & 1 x 96-well max plate
Max samples per run	168	456	1152
Quantitation throughput	96 samples in less than 30 minutes	384 samples in less than 2 hours	1152 samples in 142 minutes
Kinetics per run	72	192	512
Epitope binning	12 x 12	16 x 16	32 x 32
Minimum sample volume	180 µl	40 µl	40 µl
Baseline noise	≤ 4 pm (RMS)		
Baseline drift	≤ 0.1 nm/hour		
Association rate k _{on}	10 ¹ - 10 ⁷ M ⁻¹ s ⁻¹		
Dissociation rate k _{off}	10 ⁻⁶ - 10 ⁻¹ s ⁻¹		
Affinity constant $K_{_D}$	10 pm – 1 mM		
Dimensions	46 x 67 x 32 cm	63 x 73 x 44 cm	84 x 114 x 77 cm
GMP software	Optional		
Temperature	Ambient – 40°C		
Automation compatible	no		yes



The sensorgram shows the real-time association and dissociation curve for binding kinetics using a GatorBio system



truments based on the Biolayer interferometry (BLI) technology. BLI measures the interference pattern of kinetics and epitope binning. The Gator Bio systems white light that is reflected from the surface of a bio- are fluidic-free benchtop instruments that are robust sensor. Binding of biomolecules to the sensor surface enough to handle everything from purified samples is measured as interference shift and recorded in real- to crude extracts or serum. time to determine kinetic association and dissociation rates between molecular interaction pairs with high

Gator Bio systems are next-gen label-free analysis ins- precision. The main applications are biomolecular quantitation, determination of intermolecular binding An extra thermal insulation of the optical bench leads A wide choice of pre-coated biosensors allows for the to improved baseline stability, which increases the quantitation and kinetic analysis of proteins, antibosensitivity while measuring long off-rates. The integdies, peptides, nucleic acids, aptamers, liposomes, rated software allows for intuitive assay setup, data AAV and small molecules. The Gator Bio systems proacquisition and analysis. Gator Bio systems use impro- vide a powerful and versatile tool to scientists at every ved biosensors, with a patented optical layer and spe- step from early drug discovery to therapeutics manucialized surface chemistry. facturing.

APPLICATIONS



The SMAP biosensor can detect binding of small molecules down to 150 Da.

BIOSENSORS

Gator Bio offers a new generation of biosensors with improved surface chemistry for enhanced sensitivity, binding capacity, robustness and regenerative capability.



Gator Probe	Dynamic Range	Regeneration
Streptavidin (SA)	Protein-dependent	No
Flex SA	Protein-dependent	Yes
SMAP	>150 Da	No
Protein A	0.02 - 2000 µg/mL	Yes
Protein G	0.02 - 2000 µg/mL	Yes
Protein L	0.02 - 2000 µg/mL	Yes
Anti-human FC	0.3-6000 µg/mL	Yes
Anti-mouse FC	0.02 - 2000 µg/mL	Yes
Antí-human FAB	0.3 - 3000 µg/mL	Yes
AAVX	1 x 10 ⁹ -1 x 10 ¹³ vp/mL	Yes
AAV9	1 x 10 ⁹ –1 x 10 ¹³ vp/mL	Yes
AAV High sensitivity	1 x 10 ⁶ -1 x 10 ¹⁰ vp/mL	No
AAV Empty/Full Ratio	5 - 100 % Full	No
Anti - His	Protein-dependent	Yes
Ni-NTA	0.25 - 1000 μg/mL	Yes
APS	Protein-dependent	No
Amine - Reactive	Protein-dependent	No
Anti-GST	Protein-dependent	Yes for K No for Q







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