

Gator® BLI Plates

PRODUCT INSERT

Part Number: 130260, 130282, 130161

Overview

Gator® BLI 96-Flat, 96- and 384-Tilt Plates are designed for Biolayer Interferometry (BLI) technology. They are made of black polypropylene and come in flat- or tilt-bottom format. These BLI plates can be utilized on Gator® and other BLI platforms that accommodate corresponding microplate formats.

Product Information

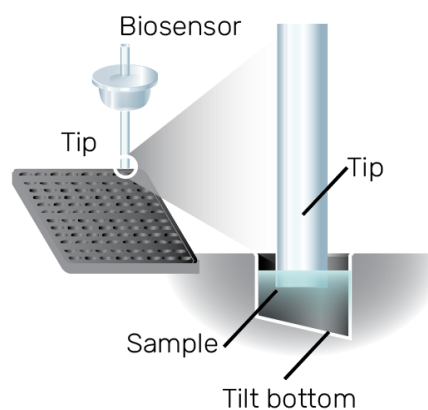
Gator® BLI Microplate Specifications

Types of analysis	Yes/no binding, quantitation, kinetics, affinity, off-rate ranking, epitope binning ^{1,2,3}
Material	Polypropylene ^{1,2,3}
Color	Black ^{1,2,3}
Dimensions	SBS standard ^{1,2,3}
Temperature range	5 °C - 60 °C ^{1,2,3}
Min volume	180 µL ¹ , 130 µL ² , 40 µL ³
Max volume	220 µL ¹ , 180 µL ² , 100 µL ³
Sterilization	No
Run time on Gator® platform	< 4 hours at 40 µL* ³
Platform compatibility	Gator® Pilot ¹ , Gator® Prime ^{1,2} , Gator® Plus ^{1,2,3} , Gator® Pivot ^{1,2,3} , Gator® Pro ^{1,2,3} and other BLI platforms compatible with either 96-well ^{1,2} or 384-well microplate format with biosensor offset at 3 mm ³

¹96-Flat, ²96-Tilt, ³384-Tilt

*³ Run time for 384-Tilt plate may vary depending on running temperature

Gator® BLI Tilt-Bottom Plate Layout



Part Number

BLI 96-Flat Plate, Case of 100: 130260

BLI 96-Flat Plate, Pack of 10: 130150

BLI 96-Tilt Plate, Case of 100: 130282

BLI 96-Tilt Plate, Pack of 10: 130162

BLI 384-Tilt Plate, Case of 100: 130161-100pcs

BLI 384-Tilt Plate, Pack of 10: 130161-10pcs

Storage Conditions

Store the pack or case in its packaging at room temperature (RT).

Sample Volume Requirement

96-Flat Plate: 180 µL - 220 µL/well

96-Tilt Plate: 130 µL - 180 µL/well

384-Tilt Plate: 40 µL - 100 µL/well

Instructions

- Samples and buffers should be equilibrated to room temperature before the start of the assay
- New biosensors need to be hydrated for at least 10 minutes before use. Add 250 µL/well of Q Buffer or sample diluent (if samples are in another diluent such as media) to as many columns of the Max Plate (Gator Bio, PN. 130062) as desired depending

- on the number of samples being analyzed
- Use the tweezer to pick out a column of fresh probes and place those into which 250 mL Q Buffer or sample diluent (if samples are in another diluent such as media) has been added in the previous step
- Avoid bubbles when adding buffers and samples to the Max plate and the BLI microplates

Correlation between Gator and Greiner Plate

The BLI 96-Flat plate is designed for the wide applications on Gator® Biolayer Interferometry (BLI) systems. When assessing biomolecule interaction, the non-binding materials used of the sample plate is critical as the BLI 96-Flat plate is made of polypropylene to address such issue. The assay performance (titer dynamic range, precision and accuracy) for BLI applications in the BLI 96-Flat plate is equivalent to that in the Greiner 96-well flat bottom microplate.

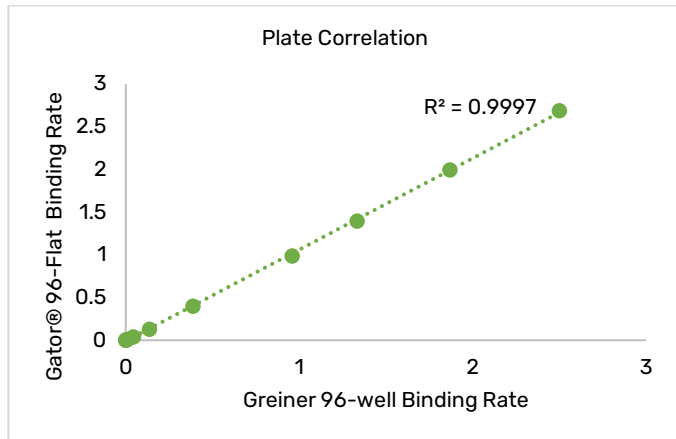


Fig. 1. Correlation curve across the dynamic range of 0.4-2000 µg/mL hlgG. Two types of plates correlate very well to one another.

Conc. (µg/mL)	Binding Rate		% CV	
	BLI 96-Flat plate	Greiner 96-well plate	BLI 96-Flat plate	Greiner 96-well plate
2000	2.6889	2.5076	0.4%	1.8%
1000	2.0003	1.8781	0.7%	1.1%
500	1.3961	1.3375	0.7%	0.7%
300	0.9863	0.9600	0.7%	0.3%
100	0.4017	0.3856	1.7%	0.4%
30	0.1287	0.1380	1.2%	0.7%
10	0.0411	0.0431	2.4%	2.6%
3	0.0119	0.0129	5.1%	4.3%
1	0.0041	0.0042	5.4%	6.6%
0.4	0.0013	0.0013	6.0%	5.3%

Table 1. Measured binding rate and percent CVs show good correlation using the Gator® BLI 96-Flat plate and Greiner 96-well microplate.

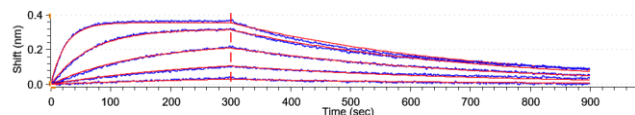


Fig. 2A.

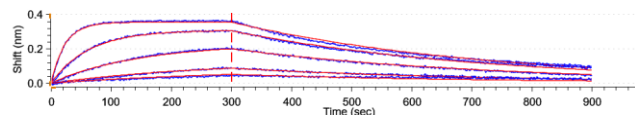


Fig. 2B.

Figure 2. A) Kinetics assay of Anti-PD-1 and PD-1 using Gator® Anti-Human IgG Fc Gen II (HFCII) in kinetics buffer (1000 rpm at 30°C) on the Gator® BLI 96-Flat plate. B) Kinetics assay of Anti-PD-1 and PD-1 using HFCII in Kinetics Buffer (1000 rpm at 30°C) on the Greiner 96-well microplate (Cat No. 655209). Both of the plates demonstrate identical kinetics sensor-grams.

Compatibility with Other BLI Platform

The BLI 96-Flat plate is also compatible with other BLI platforms that use Greiner 96-well microplate format.

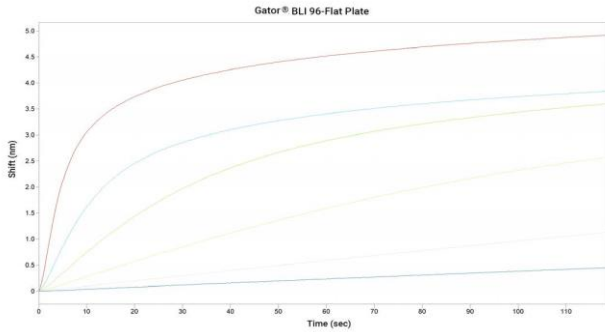


Fig. 3A.

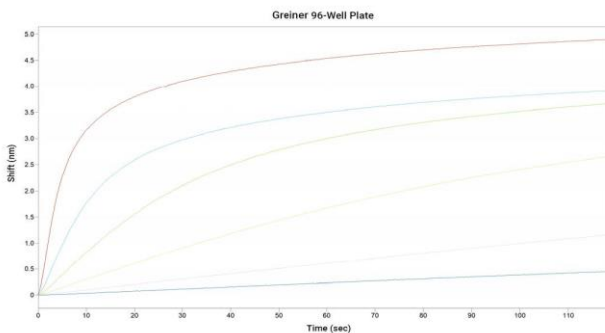


Fig. 3B.

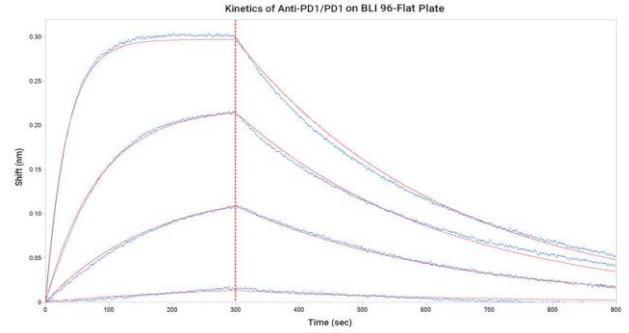


Fig. 3C.

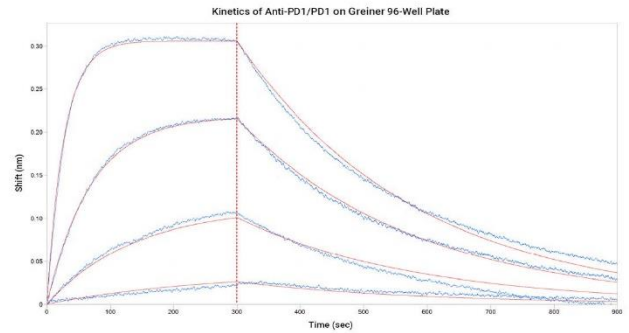


Fig. 3D.

Figure 3. Quantitation and kinetics plate comparison on other BLI platform. 3A) sensor-gram across the dynamic range of 2.7-666 $\mu\text{g}/\text{mL}$ hlgG on the BLI 96-Flat plate. 3B) sensor-gram across the dynamic range of 2.7-666 $\mu\text{g}/\text{mL}$ hlgG on the Greiner 96-well microplate. 3C) kinetics sensor-gram of Anti-PD-1 and PD-1 using HFCII biosensors on the BLI 96-Flat plate. 3D) kinetics sensor-gram of Anti-PD-1 and PD-1 using HFCII biosensors on the Greiner 96-well microplate.

Anti-PD-1 / PD-1	Gator® 96-Flat	Greiner 96-well
k_{on} (1/Ms)	2.68E+005	3.32E+005
k_{off} (1/s)	3.04E-003	3.55E-003
K_{D} (M)	1.14E-008	1.07E-008

Table 2. Kinetics data of Anti-PD-1 and PD-1 using HFCII biosensors on other BLI platform; results from Gator® BLI 96-Flat plate compares very well to those from Greiner 96-well microplates.

