



Gator® BLI 96-Flat and 96-Tilt Plate

PRODUCT INSERT
Part Number: 130260, 130282

Overview

Gator® BLI 96-Flat and 96-Tilt Plates are designed for Biolayer Interferometry (BLI) technology. They are made of black polypropylene and come in flat- and tilt-bottom format. Both the BLI 96-Flat and 96-Tilt plate can be utilized on Gator® and other BLI platforms, which accommodate the 96-well microplate format.

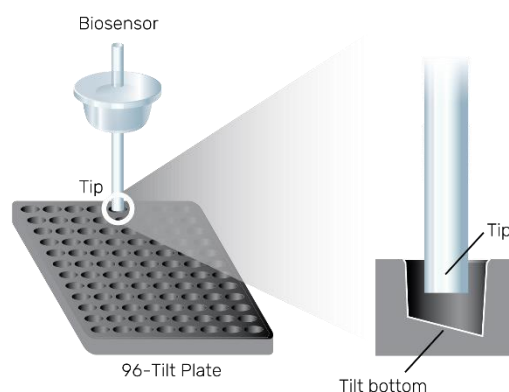
Product Information

Gator® 96-Well Microplate Specifications

Types of analysis	Yes/no binding, quantitation, kinetics, affinity, off-rate ranking, epitope binning ^{1,2}
Material	Polypropylene ^{1,2}
Color	Black ^{1,2}
Dimensions	SBS standard ¹
Temperature range	5 °C - 60 °C ^{1,2}
Min volume	130 µL ¹ , 180 µL ²
Max volume	180 µL ¹ , 220 µL ²
Sterilization	No
Platform compatibility	Gator® Pilot ¹ , Gator® Prime ^{1,2} , Gator® Plus ^{1,2} , Gator® Pivot ^{1,2} , Gator® Pro ^{1,2} and other BLI platforms ^{1,2} that accommodate a 96-well microplate format

¹96-Flat ²96-Tilt

96-Tilt 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

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

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 96 plate

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.

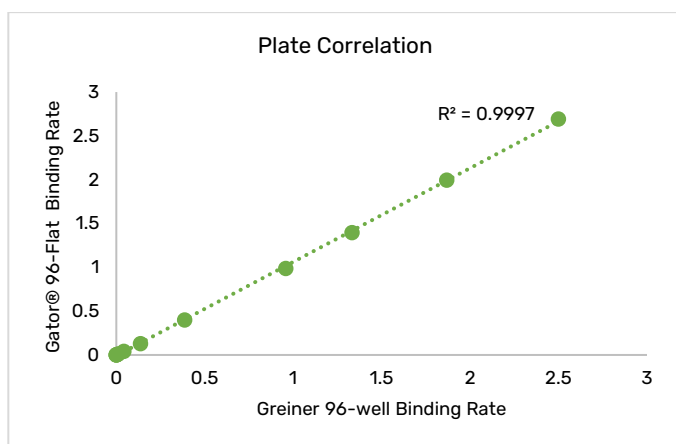


Fig. 1. Correlation curve across the dynamic range of 0.4–2000 µg/mL hIgG. Two types of plates correlate very well to one another.

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.

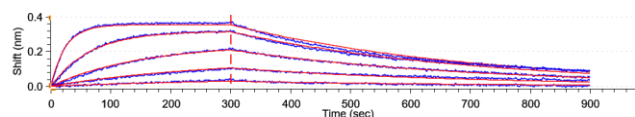


Fig. 2A.

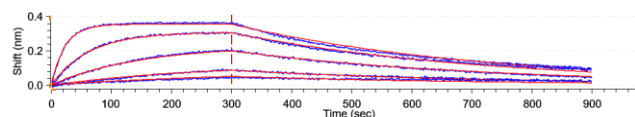


Fig. 2B.

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 PD1 and Anti-PD1 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 designed for BLI applications and can be utilized on those BLI platforms accommodating Greiner 96-well microplate format.

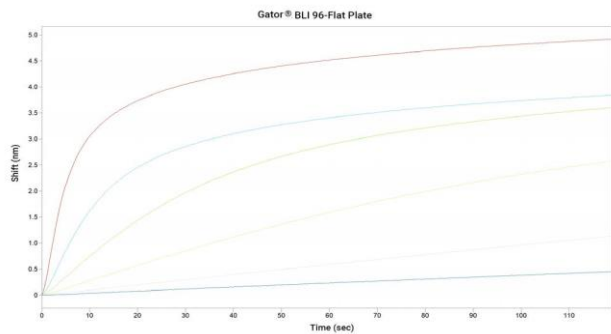


Fig. 3A.

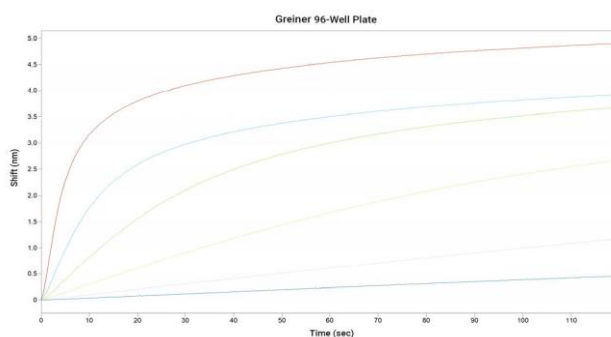


Fig. 3B.

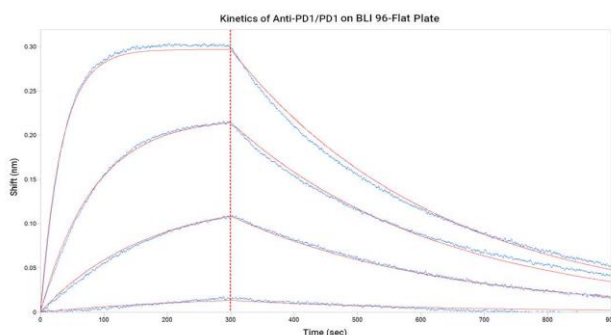


Fig. 3C.

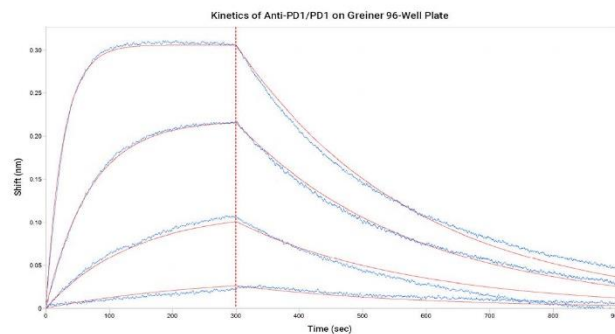


Fig. 3D.

Figure 3. Quantitation and kinetics plate comparison on other BLI platform. 3A) sensor-gram across the dynamic range of 2.7-666 µg/mL hIgG on the BLI 96-Flat plate. 3B) sensor-gram across the dynamic range of 2.7-666 µg/mL hIgG 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.

