

Gator GatorOne v2.19 Release Note

Official Release: May 2026

Introduction

This release note provides an overview of the new features and enhancements in GatorOne v2.19, designed to simplify assay setup and provide deeper analytical insights for Gator® instrument users.

- **Product Number:** 600001
- **Supported Instruments:** Gator® Pilot, Gator® Prime, Gator® Plus and Gator® Plus+ (all serial numbers)
- **OS Compatibility:** Fully validated for use on Windows 11
- **Data Compatibility:** Supports downward compatibility (Version 2.19 can open all older files, but older versions cannot open 2.19 files)

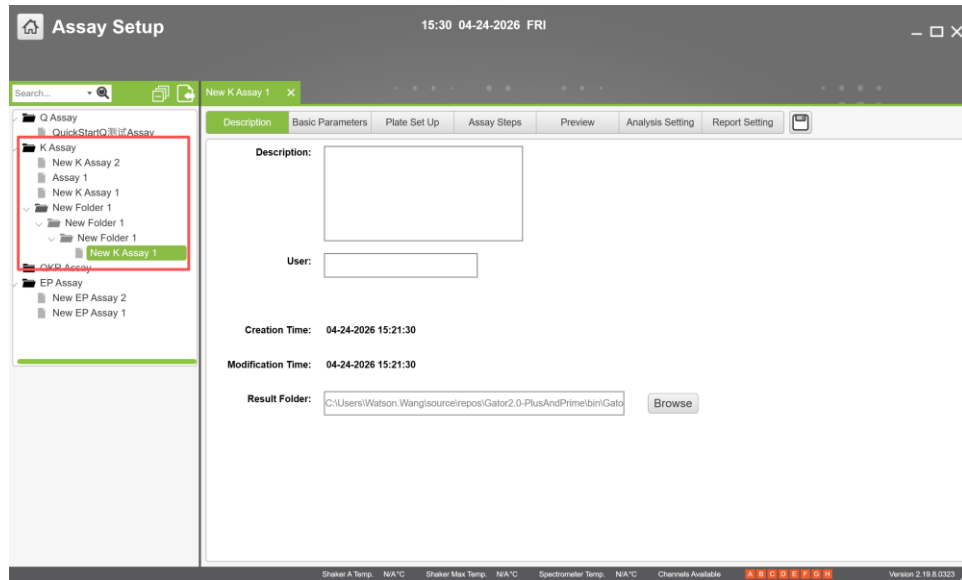
Release Highlights

- Import and export sample info and plate maps directly through Excel
- Access all kinetic models (1:1, 2:1, 1:2, Mass Transport, and Two-State)
- Group and color-code results faster using enhanced multi-selection tools
- Visualize EP data more effectively with interactive synchronization and charts

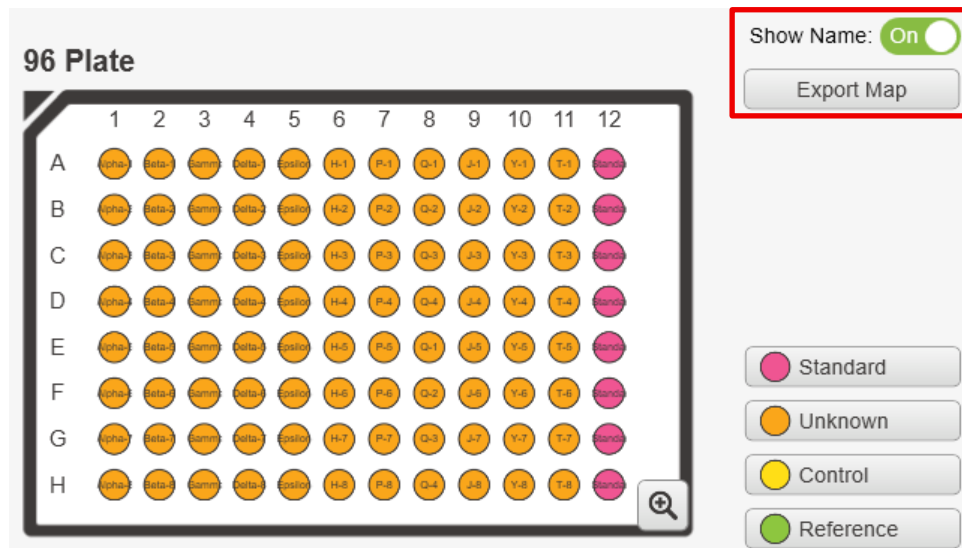
New Features & Improvements

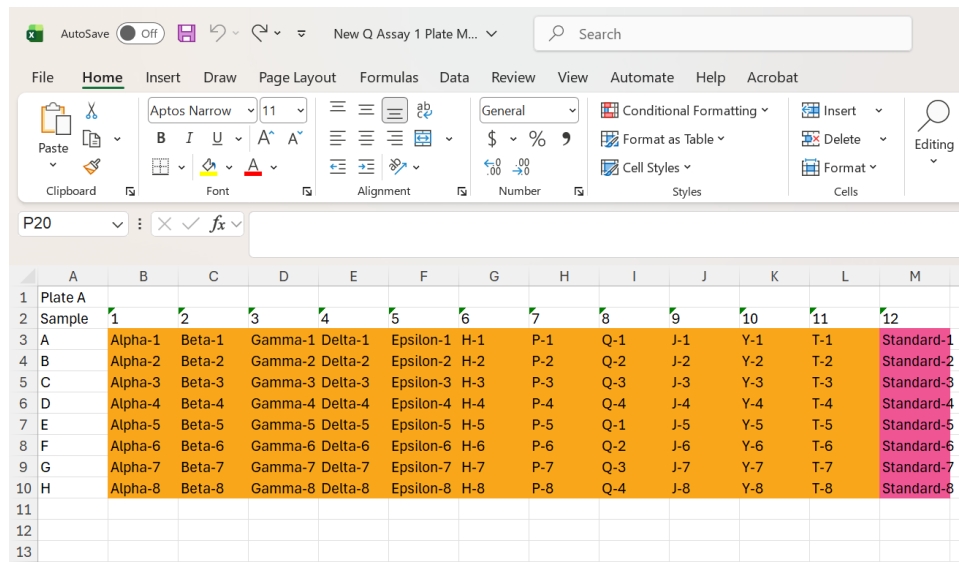
1. Assay Setup New Features

1.1. In Quantitation, Kinetics, and Epitope Binning assay setup, users can now create nested folders that automatically sync to the Results and Analysis section, ensuring data stays organized throughout the workflow.



1.2. In Quantitation and Kinetics assay setup, users can now enable or disable sample names on the plate map. When enabled, the exported plate map includes sample names and color-coded step types, providing a clear reference to make pipetting easier for the user.





1.3. In Quantitation, Kinetics, and Epitope Binning assay setup, users can now import and export sample information. This minimizes manual data entry and saves time when setting up complex experiments.

96 Plate
Max Plate

Import
Export

µg/mL ▾

Index	Position	Sample Name	Replicate Group	Type	Conc. (µg/mL)	Dilution Fa
1	A1	Alpha-1		Unknown	—	—
2	B1	Alpha-2		Unknown	—	—
3	C1	Alpha-3		Unknown	—	—
4	D1	Alpha-4		Unknown	—	—
5	E1	Alpha-5		Unknown	—	—
6	F1	Alpha-6		Unknown	—	—
7	G1	Alpha-7		Unknown	—	—
8	H1	Alpha-8		Unknown	—	—
9	A2	Beta-1		Unknown	—	—
10	B2	Beta-2		Unknown	—	—
11	C2	Beta-3		Unknown	—	—
12	D2	Beta-4		Unknown	—	—

1.4. In Epitope Binning assay setup, if "Regeneration Before Assay" is active, redundant regeneration steps are now skipped when the same sensor is reused.

Step	Sample Position	Probe Position	Speed (rpm)	Time (sec)	Step Type
1	96 Plate Column 1	Max Plate Column 1	1000	30	Baseline
2	96 Plate Column 3	Max Plate Column 1	1000	120	Loading
3	96 Plate Column 1	Max Plate Column 1	1000	30	Baseline
4	96 Plate Column 4	Max Plate Column 1	1000	180	Association1
5	96 Plate Column 5	Max Plate Column 1	1000	180	Association2
6	Max Plate Column 2	Max Plate Column 1	1000	5	Regeneration
7	Max Plate Column 3	Max Plate Column 1	1000	5	Neutralization
8	Max Plate Column 2	Max Plate Column 1	1000	5	Regeneration
9	Max Plate Column 3	Max Plate Column 1	1000	5	Neutralization
10	Max Plate Column 2	Max Plate Column 1	1000	5	Regeneration
11	Max Plate Column 3	Max Plate Column 1	1000	5	Neutralization
12		Max Plate Column 1	0	0	Return Probe

2. Result & Analysis New Features

2.1. In Kinetics analysis, users can now select multiple options to apply grouping and color-coding. This makes it more efficient to categorize results, especially when organizing large datasets during analysis.

Exp	Assay	Sample Position	Color	M Conc. (nM)	Response	Full R ²	Assoc. R ²	Dissoc. R ²	Relative Full X ²	Relative Assoc.	Relative Dissoc.
✓	Assay 1	D1	Orange	600	2.4287	0.9827	0	0	0.11	0	0
✓	Assay 1	E1	Green	200	2.2696	0.9827	0	0	0.11	0	0
✓	Assay 1	F1	Blue	66.667	2.0332	0.9827	0	0	0.11	0	0
✓	Assay 2	D1	Red	22.222	0.9905	0.9827	0	0	0.11	0	0
✓	Assay 2	E1	Yellow	7.407	0.3497	0.9827	0	0	0.11	0	0
✓	Assay 2	F1	Purple	2.469	0.1243	0.9827	0	0	0.11	0	0
✓	Assay 2	G1	Light Blue	0.823	0.0408	0.9827	0	0	0.11	0	0
✓	Assay 3	A1	Dark Blue	600	2.3695	0.9829	0	0	0.1043	0	0

Set Group By

- Assay Number
- Channel Number
- Loading Name
- Association Name
- Dissociation Name
- Binding Pair Name
- Probe Type
- Probe Position
- Probe Column
- M Conc.
- Color

Set Color By

- Assay Number
- Channel Number
- Loading Name
- Association Name
- Dissociation Name
- Binding Pair Name
- Probe Type
- Probe Position
- Probe Column
- M Conc.

2.2. In Kinetics analysis, users can now apply a full suite of kinetic models, including 1:1 (Analyte:Ligand), 2:1, 1:2, Mass Transport, and Two-State. This allows for the accurate characterization of complex binding behaviors across a wider range of biomolecular interactions.

Parameters

Data to Include

Both
Association
Dissociation

Binding Model

Model: 1:1 2:1 Mass 1:2 Two State

2.3. In Kinetics analysis, the Two-State binding model now allows users to enable or disable individual fit components. Since the Two-State model is calculated in two distinct phases, users can now view each component independently or combined. This allows for a more focused analysis of specific binding phases.

Graph Option

Graph Options
Axis Options
Legend Options

Graph Options

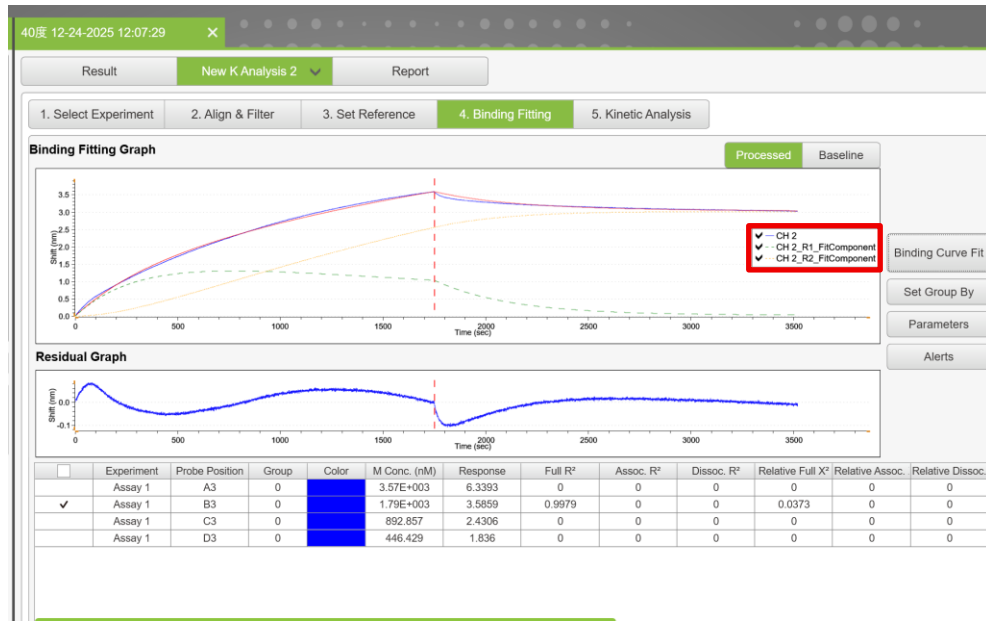
Title: Show selected legend as title in exported file

Show Gridlines Hide Legend

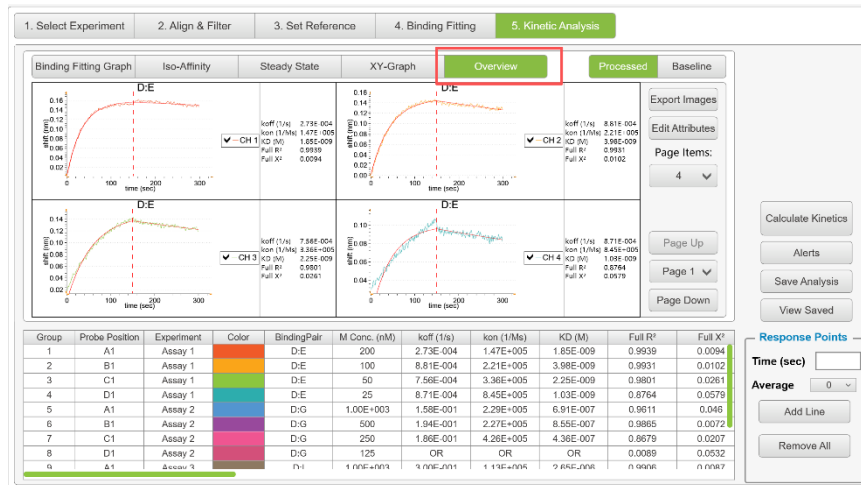
Show Time Event Show Curve Fit

Show Fit Components

Apply
Close



2.4. In Kinetics analysis, results are displayed by user-defined groups, making it easier to compare different sample sets simultaneously. This provides a structured view in Overview mode for evaluating multiple interactions.



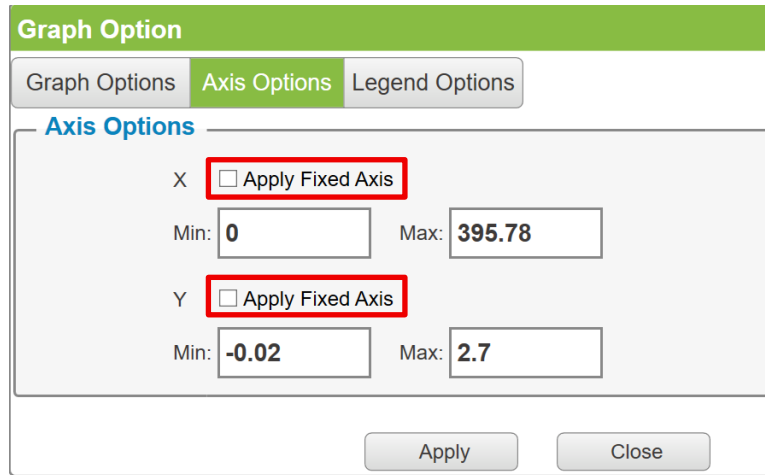
2.5. In Kinetics analysis, Overview mode results can be exported directly to a selected folder or included in the "Overview" tab within the final report.

Group	Probe Position	Experiment	Color	BindingPair	M Conc. (nM)	koff (1/s)	kon (1/Ms)	KD (M)	Full R ²	Full X ²
1	A1	Assay 1	DE	D-E	200	2.71E-004	1.47E+005	1.85E-009	0.9939	0.0094
2	B1	Assay 1	DE	D-E	100	8.81E-004	2.21E+005	3.98E-009	0.9931	0.0102
3	C1	Assay 1	DE	D-E	50	7.58E-004	3.36E+005	2.25E-009	0.9801	0.0261
4	D1	Assay 1	DE	D-E	25	8.71E-004	8.45E+005	1.03E-009	0.8764	0.0579
5	A1	Assay 2	D-G	D-G	1.00E+003	1.58E-001	2.29E+005	6.91E-007	0.9011	0.046
6	B1	Assay 2	D-G	D-G	500	1.94E-001	2.27E+005	8.55E-007	0.9865	0.0072
7	C1	Assay 2	D-G	D-G	250	1.88E-001	4.26E+005	4.36E-007	0.8679	0.0207
8	D1	Assay 2	D-G	D-G	125	OR	OR	OR	0.0089	0.0532
9	A1	Assay 2	D-H	D-H	1.00E+003	3.01E-001	1.19E+005	2.65E-006	0.9066	0.0087

2.6. In Kinetics analysis, kinetic data are now exported in scientific notation to improve readability.

koff(1/s)	kon(1/Ms)	KD(M)	koff2(1/s)	kon2(1/s)	FullR2	FullX2	Rmax	Response	Loading	kobs(1/s)	kobs Error	koff Error	kon Error	KD Error	koff2 Error	kon2 Error
3.21E-03	1.96E+05	1.64E-08	N/A	2.11E-03	0.9827	151.6492	2.418	2.4287	N/A	1.21E-01	4.38E-01	4.14E-01	4.01E+04	5.08E-11	N/A	2.64E+02
3.21E-03	1.96E+05	1.64E-08	N/A	2.11E-03	0.9827	151.6492	2.418	2.2696	N/A	4.23E-02	4.22E-01	4.14E-01	4.01E+04	5.08E-11	N/A	2.64E+02
3.21E-03	1.96E+05	1.64E-08	N/A	2.11E-03	0.9827	151.6492	2.418	2.0332	N/A	1.62E-02	4.16E-01	4.14E-01	4.01E+04	5.08E-11	N/A	2.64E+02
3.21E-03	1.96E+05	1.64E-08	N/A	2.11E-03	0.9827	151.6492	2.418	0.9906	N/A	7.55E-03	4.14E-01	4.14E-01	4.01E+04	5.08E-11	N/A	2.64E+02
3.21E-03	1.96E+05	1.64E-08	N/A	2.11E-03	0.9827	151.6492	2.418	0.3497	N/A	4.65E-03	4.14E-01	4.14E-01	4.01E+04	5.08E-11	N/A	2.64E+02
3.21E-03	1.96E+05	1.64E-08	N/A	2.11E-03	0.9827	151.6492	2.418	0.1243	N/A	3.69E-03	4.14E-01	4.14E-01	4.01E+04	5.08E-11	N/A	2.64E+02
3.21E-03	1.96E+05	1.64E-08	N/A	2.11E-03	0.9827	151.6492	2.418	0.0408	N/A	3.37E-03	4.14E-01	4.14E-01	4.01E+04	5.08E-11	N/A	2.64E+02
3.79E-03	1.97E+05	1.92E-08	N/A	1.87E-03	0.9829	136.3639	2.36	2.3695	N/A	1.22E-01	2.97E-01	2.78E-01	3.19E+04	1.48E-10	N/A	1.27E+02
3.79E-03	1.97E+05	1.92E-08	N/A	1.87E-03	0.9829	136.3639	2.36	2.1798	N/A	4.32E-02	2.84E-01	2.78E-01	3.19E+04	1.48E-10	N/A	1.27E+02
3.79E-03	1.97E+05	1.92E-08	N/A	1.87E-03	0.9829	136.3639	2.36	1.913	N/A	1.69E-02	2.80E-01	2.78E-01	3.19E+04	1.48E-10	N/A	1.27E+02
3.79E-03	1.97E+05	1.92E-08	N/A	1.87E-03	0.9829	136.3639	2.36	0.9409	N/A	8.16E-03	2.79E-01	2.78E-01	3.19E+04	1.48E-10	N/A	1.27E+02
3.79E-03	1.97E+05	1.92E-08	N/A	1.87E-03	0.9829	136.3639	2.36	0.3385	N/A	5.25E-03	2.78E-01	2.78E-01	3.19E+04	1.48E-10	N/A	1.27E+02
3.79E-03	1.97E+05	1.92E-08	N/A	1.87E-03	0.9829	136.3639	2.36	0.1123	N/A	4.27E-03	2.78E-01	2.78E-01	3.19E+04	1.48E-10	N/A	1.27E+02
3.79E-03	1.97E+05	1.92E-08	N/A	1.87E-03	0.9829	136.3639	2.36	0.0403	N/A	3.95E-03	2.78E-01	2.78E-01	3.19E+04	1.48E-10	N/A	1.27E+02

2.7. In Kinetics analysis, users can now select "Apply Fixed Axis" to maintain customized graph dimensions and scales during report export. This ensures that the visual presentation remains consistent from the software interface to the final report.



Graph Option

Graph Options **Axis Options** Legend Options

Axis Options

X Apply Fixed Axis

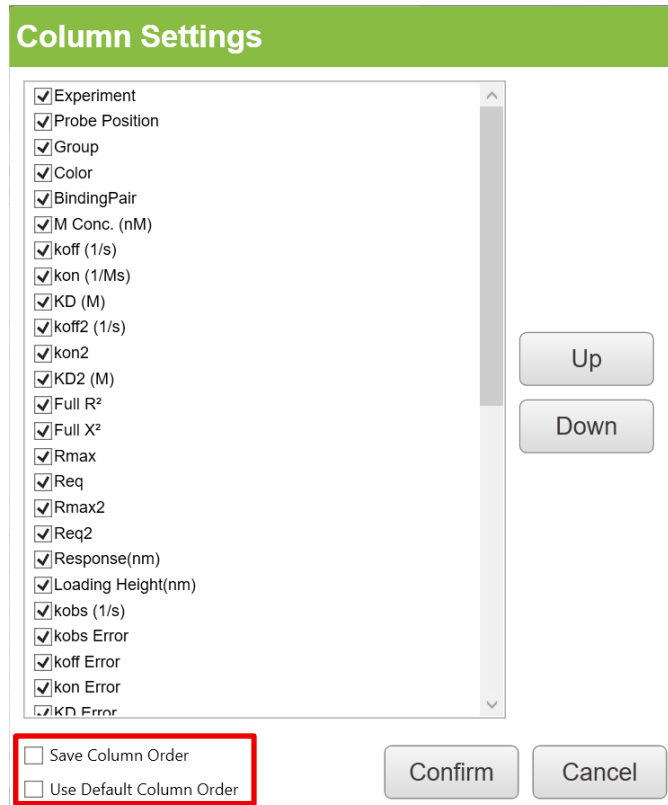
Min: Max:

Y Apply Fixed Axis

Min: Max:

Apply Close

2.8. In Kinetics analysis, the results table now supports column customization. When the 'Save Column Order' option is selected, these preferences are applied globally across all kinetic analyses, encompassing both current and future assay results; selecting 'Use Default Column Order' will revert the table to the original system settings.



Column Settings

- Experiment
- Probe Position
- Group
- Color
- BindingPair
- M Conc. (nM)
- koff (1/s)
- kon (1/Ms)
- KD (M)
- koff2 (1/s)
- kon2
- KD2 (M)
- Full R²
- Full X²
- Rmax
- Req
- Rmax2
- Req2
- Response(nm)
- Loading Height(nm)
- kobs (1/s)
- kobs Error
- koff Error
- kon Error
- KD Error

Save Column Order

Use Default Column Order

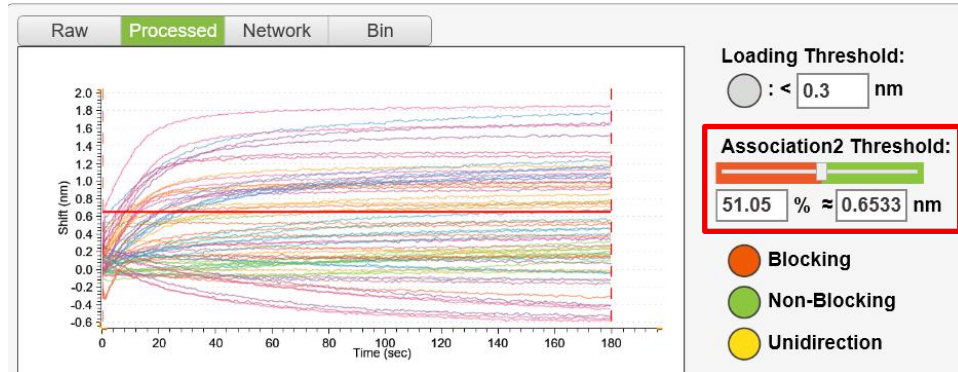
Up Down

Confirm Cancel

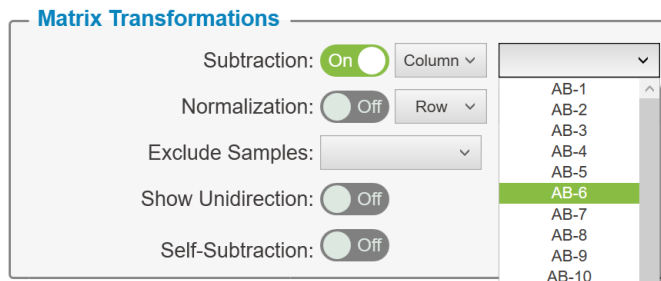
2.9. In Epitope Binning analysis, the Association2 Threshold now features an interactive slider for easier adjustment. This setting controls the threshold

for Association2, which is the binding of secondary or competing antibodies. The value is calculated as:

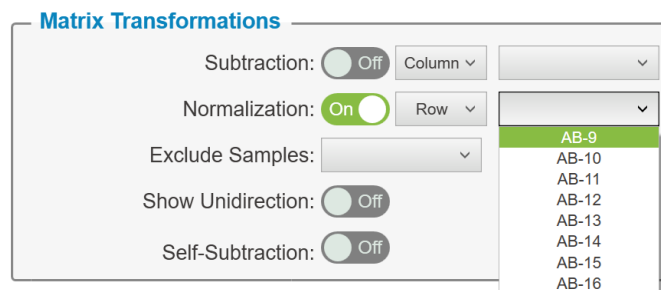
$$\text{Threshold Value} = \text{Min} + (\text{Max} - \text{Min}) \times \left(\frac{\text{Slider}^{\%}}{100} \right)$$



2.10. In Epitope Binning analysis, users can now select a specific row or column as a reference to subtract from the dataset.



2.11. In Epitope Binning analysis, users can now select a row or column as a normalization factor, where all other data points are divided by the reference.



2.12. In Epitope Binning analysis, users can now manually exclude specific samples from the dataset. This provides flexibility to remove outliers, resulting in a more focused view of the matrix.

Matrix Transformations

Subtraction: Off Column

Normalization: Off Row

Exclude Samples:

Show Unidirection: AB-9
 AB-10
 AB-11
 AB-12
 AB-13
 AB-14

Self-Subtraction: AB-12
 AB-13
 AB-14

Inhibition	Matrix	Cluster							Heat Map: <input type="radio"/> Off
AS1	AS2	AB-1	AB-2	AB-3	AB-4	AB-5	AB-6	AB-7	AB-8
AB-9	0.0577	0.0632	0.9219	0.0559	0.0984	0.8388	0.0744	1.1026	
AB-10	0.9761	0.146	1.0316	0.6466	0.1739	0.9521	0.159	1.1359	
AB-11	0.0784	0.7179	0.0608	0.0812	0.9088	0.0791	0.8348	0.138	
AB-12	0.118	0.3636	0.7022	0.0726	0.068	0.7022	0.3612	0.9402	
AB-13	0.4826	0.1127	0.5299	0.4797	0.1978	0.5281	0.5349	0.7101	
AB-14	0.3691	0.6731	0.3613	0.3649	0.8074	0.3575	0.7534	0.526	
AB-15	0.101	0.76	0.0434	0.08	0.9115	0.0488	0.8687	0.0851	
AB-16	0.8936	0.0498	0.9648	0.9082	0.0456	0.9186	0.0397	1.0823	

2.13. In Epitope Binning analysis, users can now choose to show or hide unidirectional binding events. This provides a cleaner view of the matrix by focusing only on confirmed bidirectional interactions when necessary.

Matrix Transformations

Subtraction: Off Column

Normalization: Off Row

Exclude Samples:

Show Unidirection: On Off

Self-Subtraction: Off

Blocking
 Non-Blocking
 Unidirection

Inhibition	Matrix	Cluster							Heat Map: <input type="radio"/> On
AS1	AS2	AB-1	AB-2	AB-3	AB-4	AB-5	AB-6	AB-7	AB-8
AB-1	0.0311	0.7605	0.0204	0.0282	0.9861	0.0246	0.0631	0.06	
AB-2	0.8393	0.0449	0.9375	0.7831	0.081	0.8377	0.5668	1.0299	
AB-3	0.035	0.6884	0.0089	0.041	0.911	0.0345	0.8291	0.076	
AB-4	0.0451	0.7814	0.0359	0.0383	1.009	0.0409	0.0926	0.0879	
AB-5	0.8439	0.0483	0.9219	0.7321	0.0097	0.8589	0.1603	1.0367	
AB-6	0.0505	0.7936	0.0315	0.0459	0.9796	0.0425	0.085	0.1085	
AB-7	0.1009	0.7108	0.9418	0.0814	0.3719	0.063	0.04	1.0451	
AB-8	0.0359	0.7183	0.0081	0.0177	0.9251	0.0151	0.7941	0.0205	

2.14. In Epitope Binning analysis, the maximum binding can now be calculated using a user-specified percentage of the final data points from the Association 2 loading height.

Maximum Binding Calculation

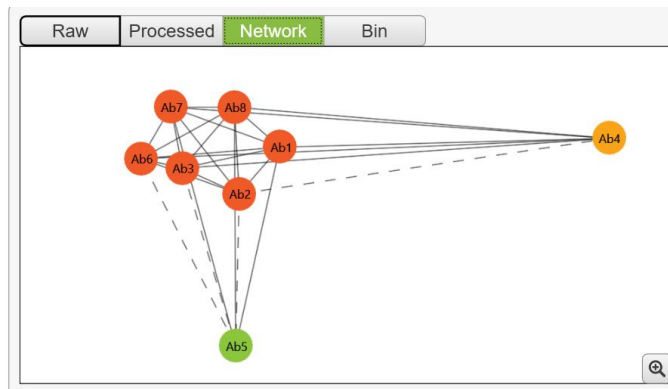
Time Range for Association2:

Lower Limit: sec

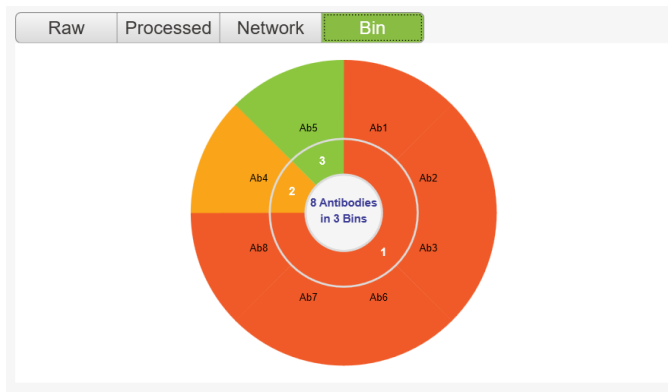
Upper Limit: sec

Height Avg.: % ≈ sec

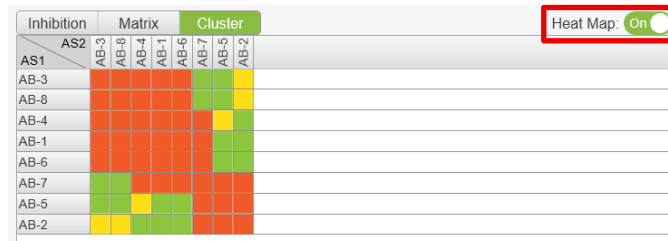
2.15. In Epitope Binning analysis, the Network Chart visualizes binding relationships by grouping samples targeting the same epitope. Connection styles represent blocking status: solid (mutual), dashed (one-way), or none (non-blocking).



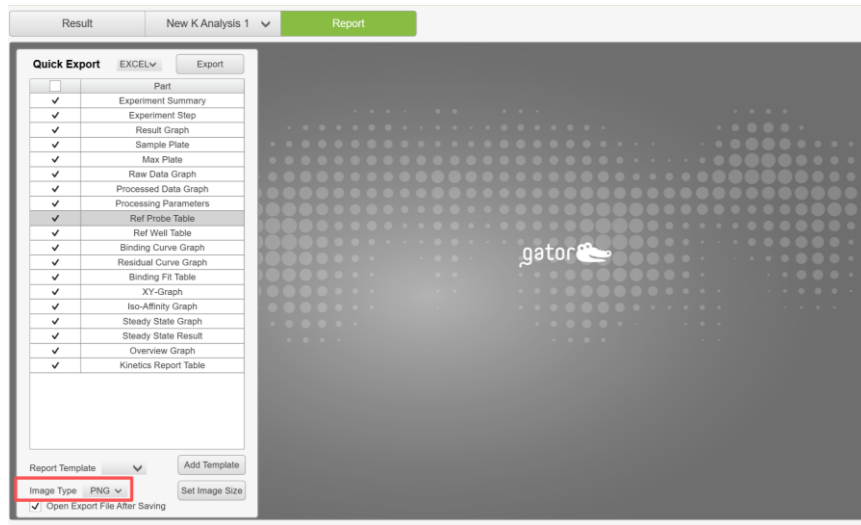
2.16. In Epitope Binning analysis, the Bin Chart provides a categorized view of results based on sample epitope targets, offering a clear summary of how a library is distributed across different binding sites.



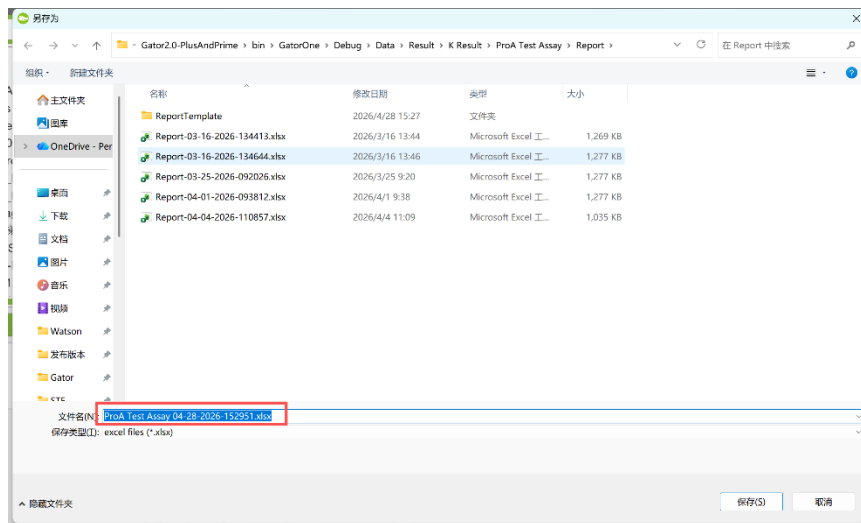
2.17. In Epitope Binning analysis, the updated Heat Map provides a simple, color-coded view of all sample interactions, making it easy to identify binding patterns across the entire dataset.



2.18. In Report, users can now select a preferred image format for exported figures, while the Overview section remains in PNG format.



2.19. In Report, default report names now combine the Assay Name and Timestamp for improved traceability.



System Requirements & Compatibility

To ensure full compatibility with new software features and to maintain optimal system stability, please confirm that your hardware and drivers adhere to the following specifications.

PC Requirements

- **CPU:** Intel Core i9 recommended (Minimum: i5 1.6GHz).
- **Memory:** 32GB DDR5 recommended (Minimum: 8GB).
- **Storage:** 1TB SSD required.
- **Connectivity:** Ethernet, Wi-Fi, and Bluetooth ports required.

Graphics Driver Requirements

- PCs with Intel 11th and 12th Gen CPUs using Arc™ & Iris® Xe Graphics.
- Driver version 31.0.101.4091 or higher.
- Update via the Intel support website if your current version is lower.
- See the [LightningChart](#) for specific troubleshooting and workarounds.

GatorOne Software Upgrade Instructions

1. Coordinate with Gator Support Team

Contact the Gator Support Team at support@gatorbio.com to obtain the software installer.

2. Preparation and Extraction

2.1. Right-click the software ZIP file and select "Extract" to unzip the contents using the Windows extraction tool.

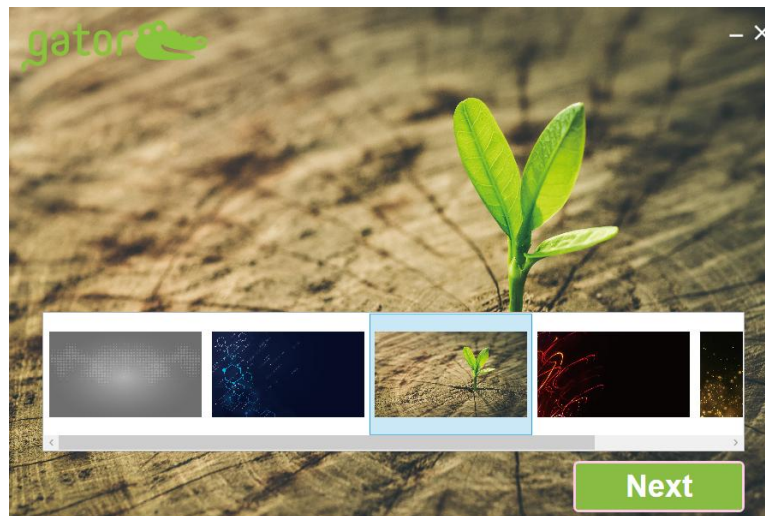
2.2. Move the extracted .exe file to the C:\ Drive of the computer workstation connected to the Gator instrument.

2.3. Ensure the GatorOne application is closed before initiating the upgrade.

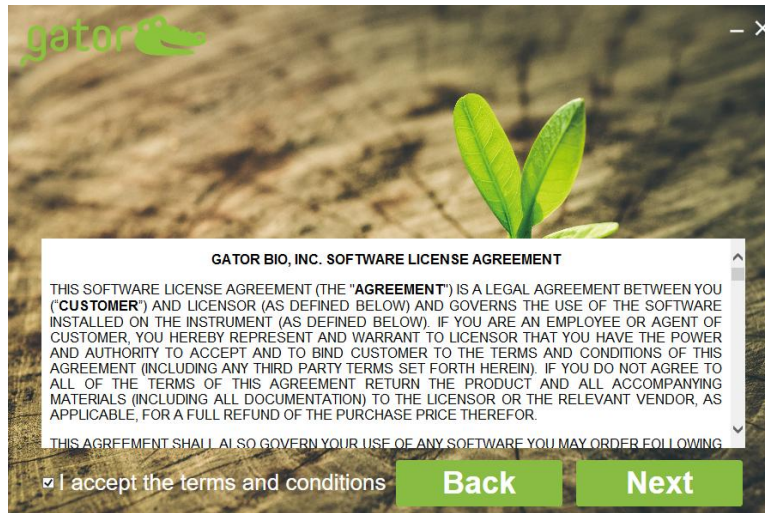
2.4. Right click and run as administrator to begin the upgrade process.

3. Configuration and Validation

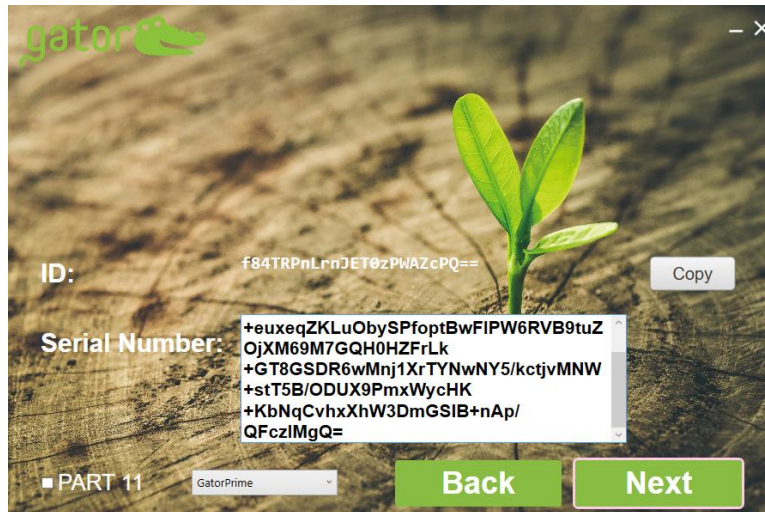
3.1. Choose one of the five available color themes and click Next.



3.2. Review the Software License Agreement, check the box to accept the terms, and click Next.



3.3. Select the appropriate Gator model from the drop-down menu located at the bottom left of the interface.

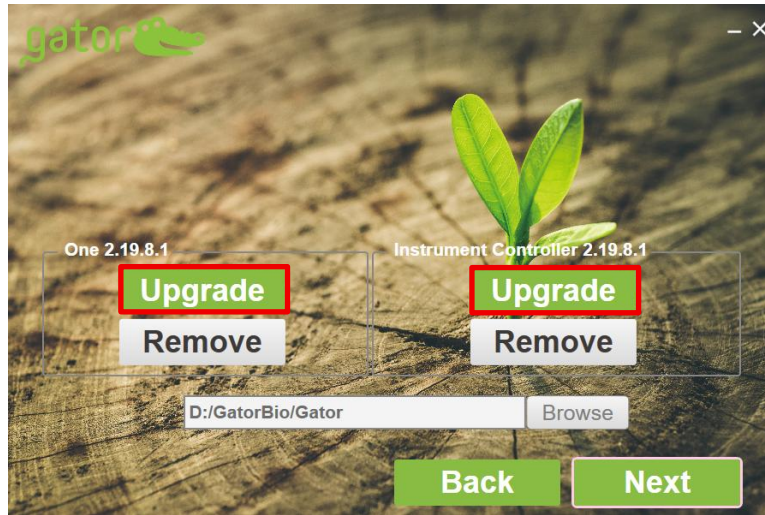


3.4. **Copy the unique ID and email it to the Gator Support Team at support@gatorbio.com to request your Serial Number.**

3.5. **Enter the valid Serial Number provided by Support and click Next.**

3.6. **DO NOT select the "PART 11" checkbox unless you are installing the CFR Part 11 compliant package for regulated environments.**

3.7. For software upgrades, ensure both GatorOne and Instrument Controller remain selected (system default) and click Next.



3.8. Once the installation finishes, click Finish to exit the installer and finalize the upgrade.

