

# GatorOne v2.7 Release Note

# Release Oct 2025

# **Introduction**

Version 2.7 of GatorOne is intended to operate the Gator® instrument.

This document is intended for current Gator Bio customers who have a Gator instrument and use the GatorOne software for assay setup and data analysis.

Product Number: 600006

Supported Instruments: Gator® Pivot and Gator® Pro (all serial numbers)

Supported operating systems: Windows 10

## **Important note:**

This software supports downward compatibility only. Data collected using Version 2.7 cannot be imported into earlier versions. However, all data from previous versions can be seamlessly imported and analyzed in Version 2.7.

# <u>Highlighted Features:</u>

- Al-Powered Smart Monitoring
- EP Template Auto Generator
- Kinetics or EP Data Combination

# **Release Note Contents:**

- Changes Since Last Release
- Upgrade Instruction



#### 1.0 SELECTED CHANGES SINCE LAST RELEASE

## 1.1 Al-Powered Smart Monitoring

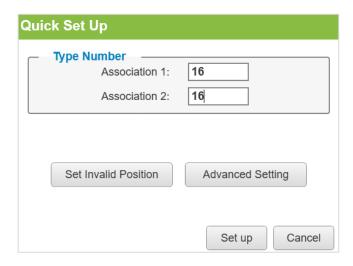
1.1.1 GatorOne now includes **Al-powered smart monitoring**, utilizing a built-in camera and advanced machine learning to automatically detect operational issues - such as incorrect plate placement or workflow deviations - before they affect your experiment.

This proactive system improves reliability, reduces user error, and enhances lab efficiency by catching mistakes in real time.

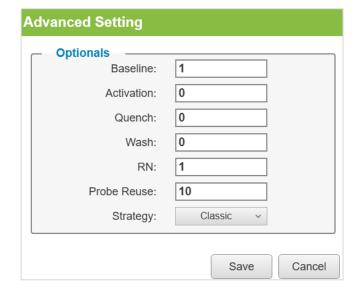
Note: To ensure activation of this feature, please contact Gator Bio Support at support@gatorbio.com to schedule onsite service for compatibility verification and activation, especially if your Pivot or Pro system was shipped or installed prior to this software release.

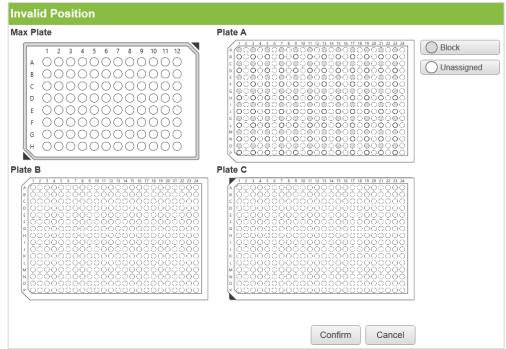
# 1.2 Assay Setup New Features

1.2.1 In the Epitope Binning assay setup, "Quick Set Up" enables auto-generation of the assay design based on user preferences, optimized for common settings, minimum assay time, or minimum sample usage. Users can select different settings for each step type to match their assay design. Additionally, if there are microplate wells that should not be used, users can choose to configure them as blocking wells.



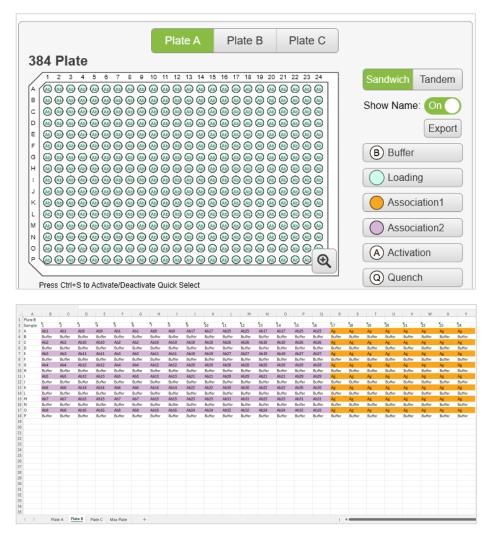




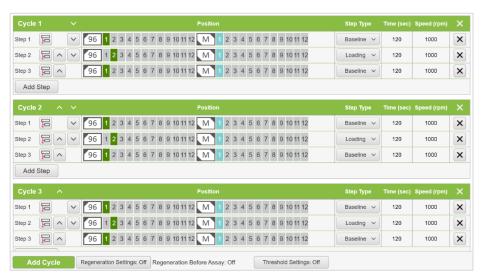


1.2.2 In the Epitope Binning assay setup, add a toggle option to show sample names in the plate layout. When enabled, export the plate layout as an Excel file that includes sample names and color-coded step types for easy printing and pipetting.



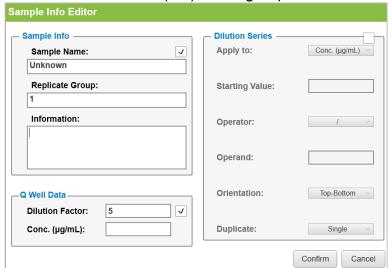


1.2.3 The EP and K experiment setup now supports cycle reordering, giving users greater flexibility and control in experiment design.





1.2.4 Enhanced Quantitation Assay Setup, enabling users to assign groups for calculating average concentrations and coefficient of variation (CV) within groups.



- 1.2.5 Introduced a disk space warning message to alert users when storage is running low (default threshold: 1 GB), helping to prevent data loss or storage issues.
- 1.2.6 Implemented a temperature detection process during experiments, triggering an alert for any temperature difference exceeding 2°C to ensure accurate and reliable results.

## 1.3 Assay Setup Amendment

- 1.3.1 Improved assay panel management: Imported assay protocols will now remain accessible and will not be automatically removed by the software, ensuring greater flexibility and data retention.
- 1.3.2 Enhanced real-time experiment flexibility by allowing users to reliably skip or extend steps, improving overall performance and reliability.

## 1.4 Result & Analysis New Features

1.4.1 Combine multiple Kinetics or Epitope Binning assay files for batch analysis in a single report, helping to streamline your workflow and reduce analysis time.

To combine files:

- In the navigation panel, hold Ctrl and click to select multiple files.
- Right-click the selection and choose "Combine".

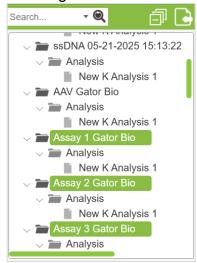


 GatorOne will generate a new assay file named: CombinedResult\_mm-dd-yyyy\_hh-mm-ss
 The assays will be concatenated in the order in which they are selected.

#### Note:

- For Kinetics, we recommend keeping assay steps and step durations consistent across all selected files to ensure better visualization and comparison.
- For Epitope Binning, aligning pairwise settings and assay step durations is also recommended for clearer interpretation.
- The sequence of plate types, either 96- or 384-well, loaded on the shakers must remain consistent across all experiment files to ensure accurate data combination. If mismatched formats are selected, the software will display a warning message and prevent combining.
- GatorOne supports combining 10 or more experiment files, offering unmatched flexibility for large-scale analysis.

For the best performance and responsiveness, we recommend keeping combined assays under 128, ensuring a balance between power and usability.

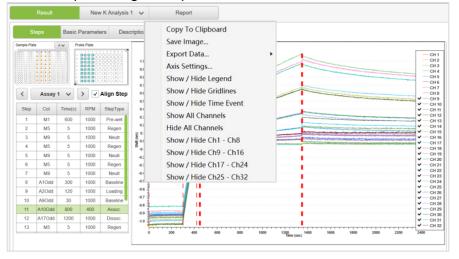


1.4.2 Added customization for sensorgram line thickness in the Settings page, allowing users to adjust the display to their preferences. Changes take effect after reopening the data file.

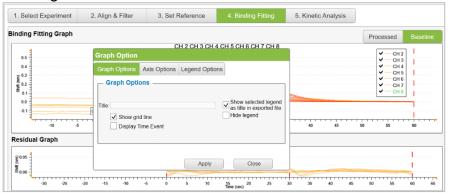




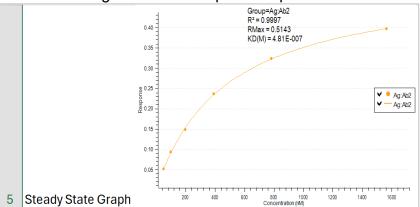
1.4.3 Users can now show or hide legends by group (based on the readhead), making it simpler to focus on the most relevant data



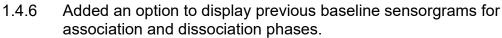
1.4.4 Introduced an option to show or hide time events on sensorgrams.

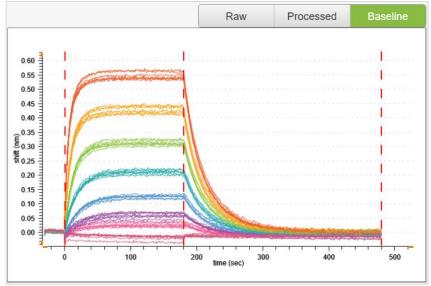


1.4.5 Sample information is now displayed in Steady State results, both on sensorgrams and in exported reports.

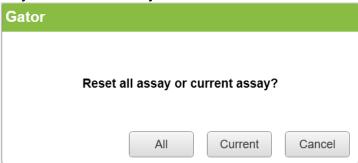






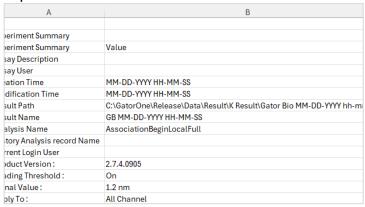


- 1.4.7 Update K analysis default alignment settings: align Y to the end of baseline, and align the interaction phase to the end of dissociation.
- 1.4.8 Added K<sub>D</sub> error calculation.
- 1.4.9 Add units to the column headers in the Kinetic Analysis results table.
- 1.4.10 Introduced an optional reset feature for assay reference settings/formulas, allowing users to reset either all assays or only the current assay.

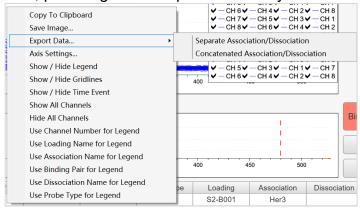




1.4.11 Added loading threshold information and file location to the exported Excel.

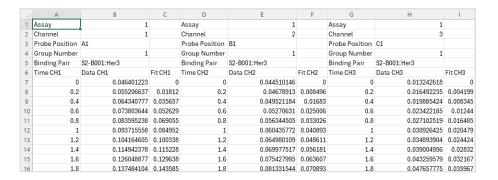


- 1.4.12 Introduced Concentration as an optional legend for kinetics analysis.
- 1.4.13 Added loading concentration details under the tab "5. Kinetic Analysis" result table and exported Excel report.
- 1.4.14 Under Kinetics Step 4: Binding Fitting, Export CSV Data now allows binding curve sensorgrams to be exported with association and dissociation signals either separated or concatenated per column, for both fitted and raw processed data, providing flexible options for analysis.

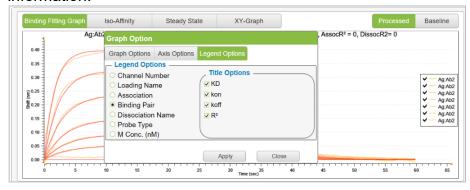


1.4.15 The export data file format in the K Binding Fitting and Kinetic Analysis tabs has been updated with additional headers - including Assay, Channel, Probe Position, Group Index, and Binding Pair - and each trace now contains only one time column, making it easier to identify and organize sample data.





1.4.16 Expanded graph customization options to include title information.



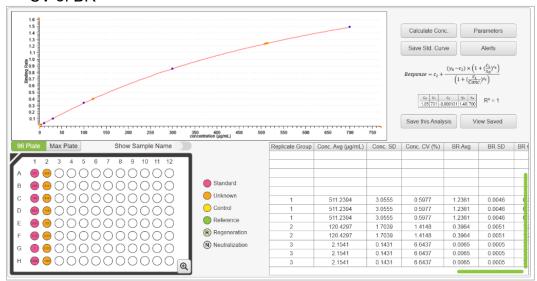
1.4.17 The result table for K assays now includes loading concentration, making it easier to review and interpret experiment data.



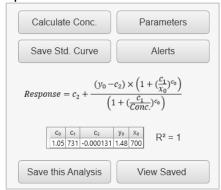
1.4.18 Added Sample Name and Concentration as legend options in quantitation results.



- 1.4.19 Quantitation results now support replicate grouping assignments to calculate:
  - Average calculated concentration
  - Standard deviation of concentration
  - CV of calculated concentration
  - Average binding rate (BR)
  - Standard deviation of BR
  - CV of BR



1.4.20 Added Quantitation Standard Curve fitting formula details, including Linear Regression, 4PL, and 5PL with weighting options.



For more details, please contact support@gatorbio.com or your local support team for further information.

- 1.4.21 Update the column header from 'Residual' to '% Recovery' in the Q Assay
- 1.4.22 Improved readability by displaying scientific notation for extremely low concentrations.



- 1.4.23 Under Q Result, legends can now display sample names and concentrations, making it easier to identify and interpret assay data at a glance.
- 1.4.24 EP results now support self-subtraction, simplifying background correction and improving data clarity.
- 1.4.25 Removed the Canvas feature.
- 1.4.26 Curve Fitting Improvements in BLI Analysis. For more details, see Appendix

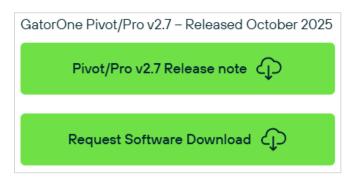
# 1.5 Result & Analysis Amendment

- 1.5.1 Resolved the issue where the table of contents did not refresh properly in the graph legend
- 1.5.2 Restored the latest analysis session parameters for Advanced Quantitation under kinetics analysis.
- 1.5.3 Corrected an issue causing abnormal double reference subtraction.
- 1.5.4 The % recovery calculation is now omitted when no known concentration is provided for quantitation.
- 1.5.5 Updated the EP Tandem Inhibition calculation to correctly handle cases where the inhibition value approaches infinity.



#### 2.0 UPGRADE INSTRUCTIONS

- 2.1 (For US customers only) Visit www.gatorbio.com. In the upperright corner, click "Shop" and log in using a valid email and password, then proceed to Step 2.3.
- If you do not have access through "Shop", navigate to the "Products" tab, click "Software", select "Request Software Download." Complete the form and click "Submit", then proceed to Step 2.5.





- 2.3 Click "Add to Cart" or "Add to Quote", then go to your cart (upper-right corner) to proceed with checkout.
- 2.4 Complete the order form and submit. You will see an "Order Received" confirmation, and a Gator Bio representative will follow up.
- 2.5 For questions about eligibility for a complimentary software upgrade, contact Gator Bio Support at support@gatorbio.com, your regional Gator Bio representative, or your authorized



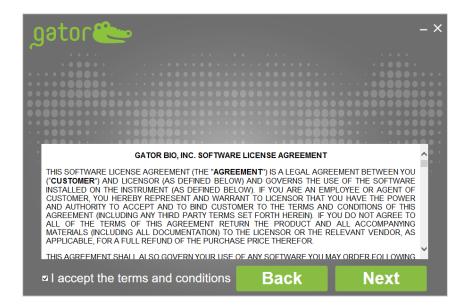
distributor, or use the request form from Step 2.2.

- 2.5.1 After submitting the request form or receiving order approval, please follow up with your Gator Bio representative and provide the Installation ID displayed during software installation or upgrade. The representative will verify your eligibility and provide a valid Serial Number, which you can use during the installation or upgrade at Step 2.12.
- **2.6** After submission, you will receive a download link from Gator Bio. Click the link to download the software ZIP package.
- **2.7** Right-click the downloaded ZIP file and select "Extract" to unzip it using the Windows extraction tool.
- **2.8** Move the extracted .exe file to the C:\ Drive on the computer connected to your Gator instrument.
- **2.9** Close the GatorOne software, then right-click the installer (.exe) and select "Run as administrator" to begin the upgrade.
- **2.10** Select one of the five color themes for the software and then click Next.



**2.11** Read through the Software License Agreement and check the box to agree. Click Next.





**2.12** Choose the correct **Gator model** from the drop-down list at the bottom left to upgrade or install the GatorOne Software.

Note: A **new Serial Number is required** for both upgrades and new installations. Please obtain this from your Gator Bio representative after eligibility verification.

- 2.12.1 Click the "Copy" button and share the Serial Number with your Gator Bio representative if requested.
- 2.12.2 Enter the Serial Number in the field provided.
- 2.12.3 Click Next to continue.
- 2.12.4 Important: Do not check the "PART 11" box unless you are installing the CFR Part 11–compliant package.





**2.12** Leave the default setting to Upgrade both GatorOne and GatorController, then click Next. DO NOT select "2 PCs" unless advised by a Gator Bio representative.



**2.13** When the installation completes, click Finish to close the installer.





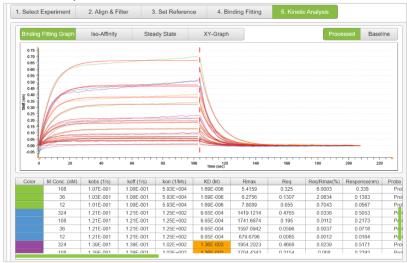
#### 3.0 APPENDIX

The latest updates to our curve fitting algorithms provide greater robustness and reliability across a wide range of experimental conditions. These improvements ensure that users obtain accurate kinetic results even in challenging datasets, while preserving legacy fitting modes for direct comparison and continuity with previous studies.

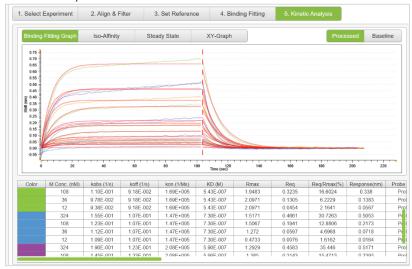
# **Key Enhancements**

Reliable Handling of Fast-Rate Curves
 Calculations are now constrained within a defined confidence range, ensuring stable, consistent, and trustworthy results.
 Example:

#### Fast-Rate, Enhanced Off



#### Fast-Rate, Enhanced On

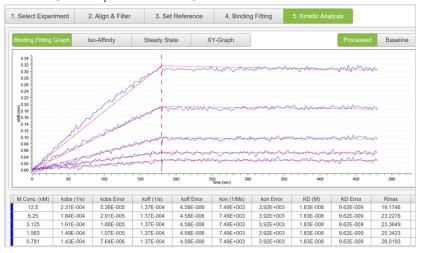




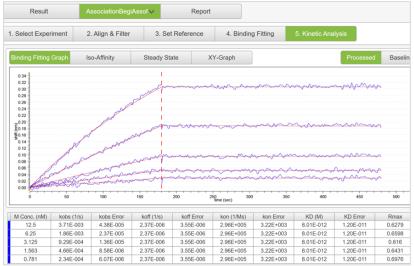
Stability in Underdetermined Systems
 Linear or near-linear curves are managed with controlled limits, avoiding infinite or non-physical outputs.

# Example:

## Linear Curves, Enhanced Off



## Linear Curves, Enhanced On



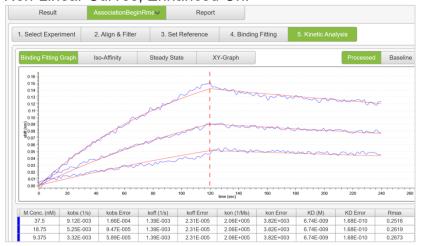


## Example

## Non-Linear Curves, Enhanced Off:



# Non-Linear Curves, Enhanced On:



- Improved Global Fitting with Data Screening
   Poorly fitting datasets are automatically flagged and filtered, improving the
   accuracy and reliability of global fitting.
- Legacy Fitting Preserved for Continuity
   Original fitting methods remain available, enabling direct comparison with historical data and a smooth transition to the improved workflow.





## **Performance Enhancements**

- More reliable kinetic constants across diverse assay conditions.
- Minimized risk of non-physical results in challenging datasets.
- Increased confidence in small molecule and weak binder analysis.
- Improved stability and reproducibility of fitting results.
- More accurate and dependable global fitting for complex datasets.
- Continuity with past results while benefiting from improved fitting accuracy.