

# Gen5™ Data Analysis Software

Gen5™ 2.0 Data Analysis Software is a culmination of over 30 years of experience and user feedback resulting in the newest and most advanced microplate reader software available today. Gen5 is a unique combination of power and ease-of-use that drives productivity and saves time. Use Gen5 to control BioTek's microplate readers and export data, or as a fully integrated processing tool.

## Features:

- **Beginner-Friendly Software**

Gen5 2.0 is built around logical laboratory workflows to read microplates and produce, analyze and export data. In Gen5, you simply click "Read Now" and follow the prompts. At the end of the read, answer the question: "Do you want to export to Excel?" With Gen5 you don't have to spend hours figuring out how to get the job done.

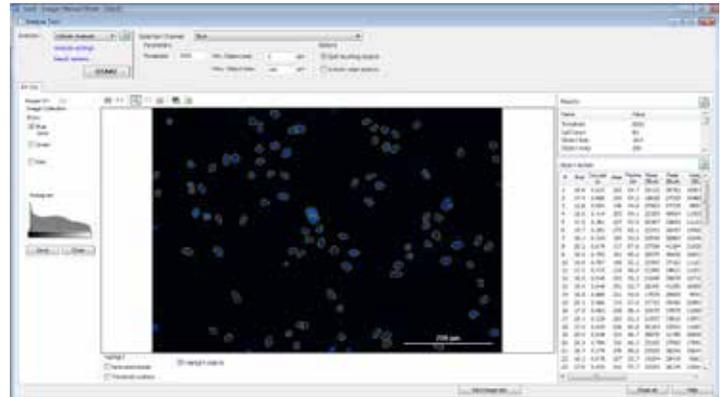


- **All-in-One Solution**

Control any BioTek imaging, multi-mode or single mode microplate reader, automate the entire process and produce publication-ready reports in minutes using one integrated, powerful software tool. It doesn't get more efficient than this. Gen5 2.0 comes with powerful built-in tools such as 4-P and 5-P curve fits with or without weighting, parallel-line analysis, advanced kinetic analysis, well scanning and much more.

- **Up-to-Date Web-based Sample Files**

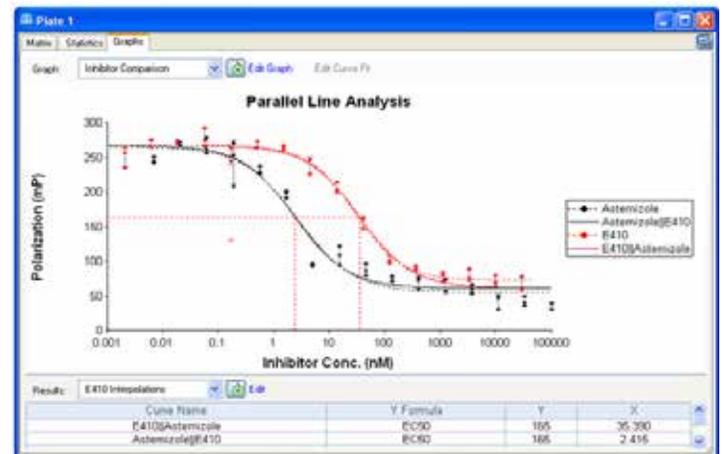
A searchable library of sample files with data is available online. Existing files are kept up-to-date and new files are added regularly. Gen5 users can upload files to share their experiments and sample data with other Gen5 users.



Cell counting is fast and easy with Gen5 Control of Cytation3.

- **Cellular Imaging and Analysis**

With Cytation™3 Cell Imaging Multi-Mode Reader, Gen5 offers manual and automated capture modes, along with image processing, analysis and output capability. Special attention has been placed on result presentation familiar to microplate users so complex data can be displayed in a clean, colorful way to facilitate interpretation.



- **Gen5 Secure: You are in Control**

Gen5 2.0 Secure is for you if secured data storage, user group management or 21 CFR part 11 compliance are a core part of your requirements. It includes additional features such as 25 licenses per copy and electronic signature of protocol and experiment files.

## Specifications:

### General

Compatible readers:	All current BioTek microplate readers
Validation guidelines:	Validated per US FDA and ISO 9001/ISO 13485 requirements
Software validation package:	Available
Operating system:	Microsoft® Windows® 8 and 7 (Professional editions: 32 and 64 bit), Windows XP (Pro editions)
Minimum requirements:	Pentium® III 500 MHz, 512 MB RAM / 4 GB RAM for imaging, 2 GB hard drive space
Plate geometries/Labware:	1-1536 well plates ( <i>reader dependent</i> ) Microscope slides and T25 flasks (Cytation3) Take3™ Micro-Volume Plates
Languages available:	English, Chinese, Japanese, Russian

### Reader Control

Simultaneous control:	2 readers
Pathlength correction:	Yes ( <i>reader dependent</i> )
Steps per sequence:	Unlimited
Detection modes per sequence:	Unlimited
Multi-mode kinetic:	Up to 3 detection modes per kinetic loop
Area scan resolution:	Up to 99 x 99 (9,800 data points per well) on select readers
Shaking duration:	16-minutes stand-alone step; Unlimited continuous shaking in kinetic cycles

### Data Analysis

Protocol type:	Standard (plates are independent) Calibrator (1 calibration plate, multiple sample plates) Multi-Plate (standard and controls on several plates) Paneled (multiple assays per plate)
Sample types:	Standards, assay controls, sample controls (spikes), blanks, samples, customized naming of samples
Transformation steps:	Unlimited
Basic transformations:	Blanking, ratio, delta, normalization, custom
Curve fits:	Linear, polynomial (degree 2 to 6), 4-P, 5-P, Logit-Log, Point to Point, Spline
Weighting:	1/Y, 1/Y <sup>2</sup> , 1/(Std dev Y <sup>2</sup> ), 1/S <sup>2</sup>
Parameter constraint:	Estimate all, Y intercept, fixed parameters
Parallel line analysis:	Standard, non linear analysis for relative potency calculation
Dose-response:	EC <sub>50</sub> / IC <sub>50</sub> calculation
Kinetic analysis:	Max slope, mean slope, min/max signal, lag time, Y intercept, onset time, area under the curve, custom
Spectral analysis:	Min/max signal, peak wavelength, integral, custom
Qualitative analysis:	Multi-cutoff data analysis
Image analysis:	Cell counting, sub-population analysis (see Cytation3 on <a href="http://www.biotek.com">www.biotek.com</a> for detailed information)

### Imager Control

Modes:	Fluorescence and brightfield image capture; manual or automated
Read methods:	End point, time-lapse, kinetic, well mode, montage
Image format save options:	TIF, JPEG, PNG, GIF, BMP and EMF
Image import:	TIF file import for analysis

### Exporting

Format:	.xls, .xlsx, .xslm, .csv, .txt
Quick export:	One click any data / graph on screen
PowerExport:	Auto / customizable embedded Microsoft Excel spreadsheet
ASCII export:	Auto / customizable text export
Number of exports per file:	Unlimited

### Reporting

Number of reports per file:	Unlimited
Report type:	Per plate: All data regrouped per microplate Per sample: All data regrouped per sample

### Gen5 Secure - 21 CFR Part 11 Compliance

System administrator:	Creation and maintenance of user accounts and user groups
Protected functions:	Per user account
Time-stamped audit trails:	Data and protocol audit trails
Electronic signatures:	Data and protocols
Secure record storage:	Gen5 files stored in secure shared-access database
Windows authentication:	Single Sign On (SSO) available
Email notification:	Automatic email notification based on trigger event

\*Specifications subject to change.

## Versions:

### Gen5

Advanced reader control functionality, powerful data analysis and flexible exporting/reporting tools combined in one easy-to-use software; For applications in life science research, pharmaceutical and biotechnology laboratories.

### Gen5 RC (Reader Control)

Simple reader control interface provides easy data collection and output to text and Excel.

### Gen5 Secure

For secured data storage, user group management or 21 CFR part 11 compliance; Includes 25 licenses per copy and automatic email notification on trigger events.



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