



Genedata Screener[®]

for Biopharma

Biopharmaceutical research involves a wide range of cellular, biochemical, and biophysical assay types, and technologies to identify and characterize suitable molecules along the antibody discovery workflow. Genedata Screener[®] automates the capture of the associated raw data, optimizes the analysis, and makes information readily available for project decisions downstream. The solution generates precise and consistent results with interactive review, dedicated visualizations, and full traceability.

One Single Platform

Genedata Screener is part of the Genedata Biopharma Platform, combining workflow systems and data analytical systems into a fully integrated solution for Biopharma R&D.

The workflow systems collect data and provide data access across the whole biopharmaceutical R&D process, guaranteeing data integrity. Genedata Screener is the data analytical system for in-vitro assays, harmonizing and automating the analysis of data from technologies and assays such as ELISA, Mirrorball, Flow Cytometry, Biolayer Interferometry (BLI), Surface Plasmon Resonance (SPR), and others.

This brochure outlines the advantages that Genedata Screener brings to the biopharmaceutical workflow.

Standardize

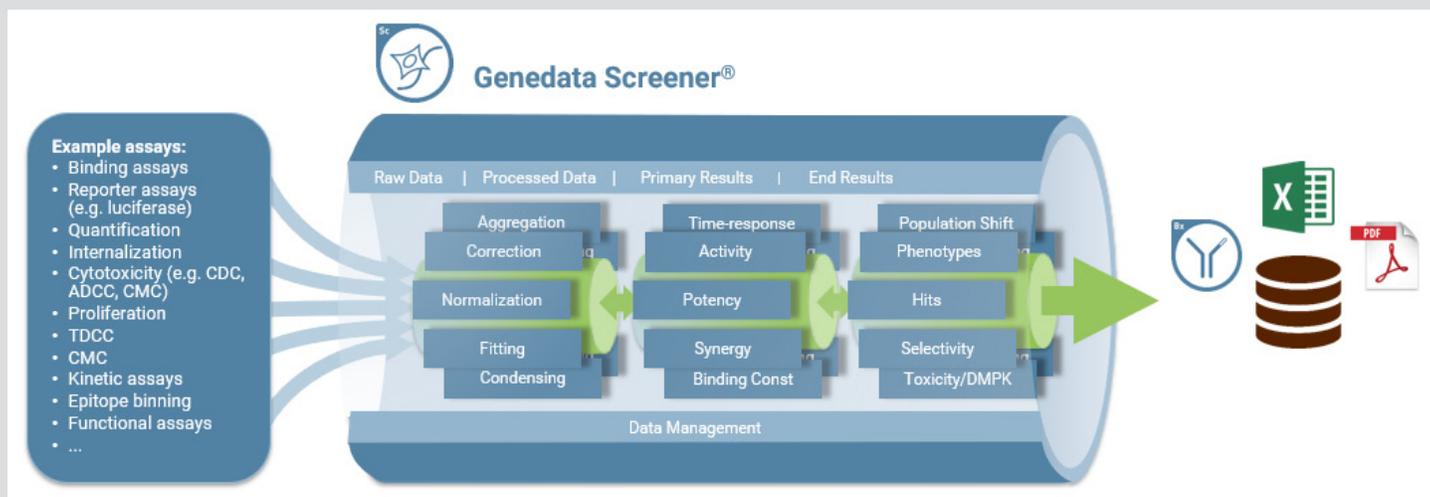
Genedata Screener builds on more than 15 years of expertise in assay data analysis, with interface and processes tailored to each individual type of analysis. Dedicated methods, visualizers, and statistics are all within easy reach, allowing you to quickly set up and run your analysis. For recurring processes, you can save and reuse your setup.

Screener makes sure each analysis is performed according to best-practice and that every deviation from the standard procedure is recorded. This includes analyses from different instruments producing the same type of data – as an example, it is easy to integrate every single one of your SPR instruments into the same workflow and then compare the results, with confidence that while the instruments or the biology may perform differently, the analysis does not.

Streamline

After analyses have been standardized, they are ready to be automated. The automation can cover simple analyses performed multiple times per day or week, such as ELISA, or more complex analyses such as SPR and BLI. With Genedata Screener, you can automate the analysis all the way from assay data input to data warehouse or opt to have control steps and interactive analysis if you discover any issues. Customizable business rules allow you to precisely control when data should be reported and when it needs to be reviewed.

Just automation is not enough – you need flexibility to make sure that what you report is reliable and reaches your quality standards. Genedata Screener makes sure you can trust your data at every step of the way.



Genedata Screener streamlines biopharmaceutical data analysis

(FIG. 1) Genedata Screener supports a wide range of assay types from multiple assay technologies, providing the entire data processing workflow from raw data to final results with best-practice workflows, visualizers, and statistics.

Visualize

Calculation software not designed for assay analysis, such as spreadsheets, requires additional software or complex macros to visualize quality artifacts and assess the results. With Genedata Screener, you import your data and directly see the computed results visualized on multiple levels on the screen. For example, dose-response results are available next to heatmaps of the plate level data as soon as you open your analysis session and you can view all relevant information side by side.

The interactive visualizers allow you to directly mask or annotate data, or take a closer look at the underlying information. You can also create overlays for easy comparisons and all plots and tables are easily exportable. With the right visualizations, issues are easy to spot, your analysis is faster, and results quality is higher.

Focus on Science

With less time spent on copy/paste and moving between calculation and visualization software, you have more time to conduct experiments. When you can trust that your results are valid – receiving warnings when they are not – you can spend your time investigating what they really mean. With all your assay results collected in one place, you can easily compare the biological behavior of a molecule across different assays.

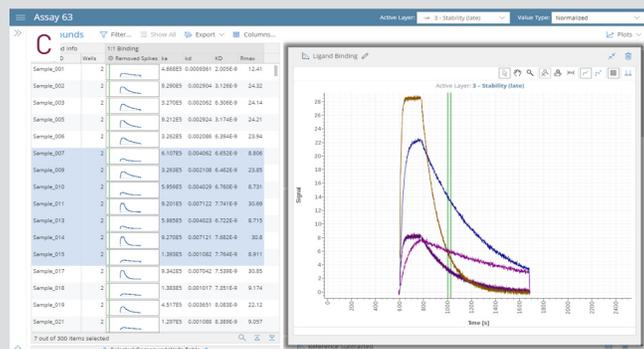
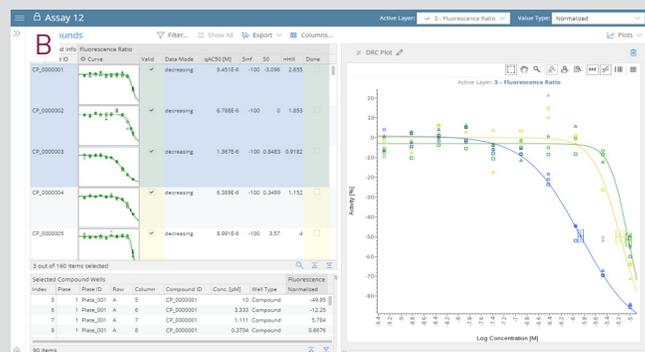
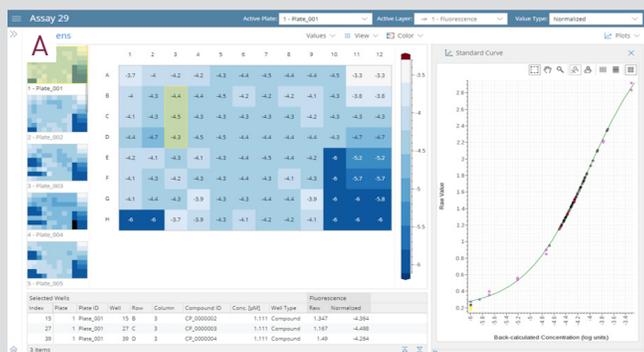
Genedata Screener allows researchers of multiple departments to collaborate by making handovers of data and results transparent. Scientists can focus on their science instead of collating data from multiple sources. Managers can trust that the data quality reaches their required standards and that the results are reliable.

Solution of Choice

Genedata Screener is an enterprise software solution for assay data management, with high levels of standardization and automation, flexibility, interactivity, and built-in business logic.

Moreover, with Genedata Screener as part of the Genedata Biopharma Platform, you benefit from a complete end-to-end solution for designing, registering, creating, testing, selecting, producing and characterizing your molecules at scale, with end-to-end traceability.

This creates a software solution that realizes the full potential of your biopharmaceutical research.



Standardize & Automate Assay Analysis

(FIG. 2) Immediately review your results after raw-data loading, assess quality, and address issues with interactive visualizations.

Examples:

A. Titer quantification assay using a standard curve showing an overview of heatmaps along with a drill-down on results from one plate.

B. Cytotoxicity assay using dose-response curve fits to generate IC50 results, showing an overlay of the concentration-dependent cytotoxic effect of two antibodies.

C. Antibody affinity determination with SPR, here with an overlay of selected pre-processed sensorgrams.

Genedata Screener

Genedata Screener® analyzes, visualizes, and manages screening data from in-vitro screening assay technologies across the enterprise, including very complex as well as ultra-high throughput experiments. Its screening-oriented business logic enables rapid processing and comprehensive analysis of complete campaigns.

The Genedata Biopharma Platform

The Genedata Biopharma Platform consists of two types of systems: Workflow Systems and Data Analytical Systems. The Workflow Systems Genedata Biologics® and Genedata Bioprocess® collect data and provide data access across the whole biopharmaceutical R&D process and guarantee data integrity. The Data Analytical Systems Genedata Expressionist®, Genedata Selector® and Genedata Screener® harmonize and automate time-consuming data analysis workflows of complex data types such as MS, NGS, and various other assays.

Services and Support

Genedata offers a range of services and support, from installation and customization of Screener to global roll-out support, training, data analysis, application consulting and IT consulting services, all tailored to the specific needs of your organization. Our services team consists of highly skilled professionals with extensive domain knowledge in screening and software technology, bringing specialized know-how and experience to your organization.

Next Steps

To find out more about Genedata Screener, please visit www.genedata.com/screener.

For a conversation about your screening analysis needs or to schedule a live demonstration, please contact us at screener@genedata.com.



Genedata Screener® is part of the Genedata portfolio of advanced software solutions that serve the evolving needs of drug discovery, industrial biotechnology, and other life sciences.

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