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# Genedata Screener<sup>®</sup>

## for Mechanistic Analysis



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Early inclusion of mechanistic information is becoming key for modern drug discovery programs. Kinetic information in particular increases the yield of high quality lead candidates by better selection and speeds up their propagation by instilling higher confidence in their potential. To supply this information, Genedata Screener allows processing of biophysical and mechanistic assays in scalable high throughput. The software reliably provides consistent results and makes all detailed mechanistic parameters available to project scientists across the organization.

### Better Decisions

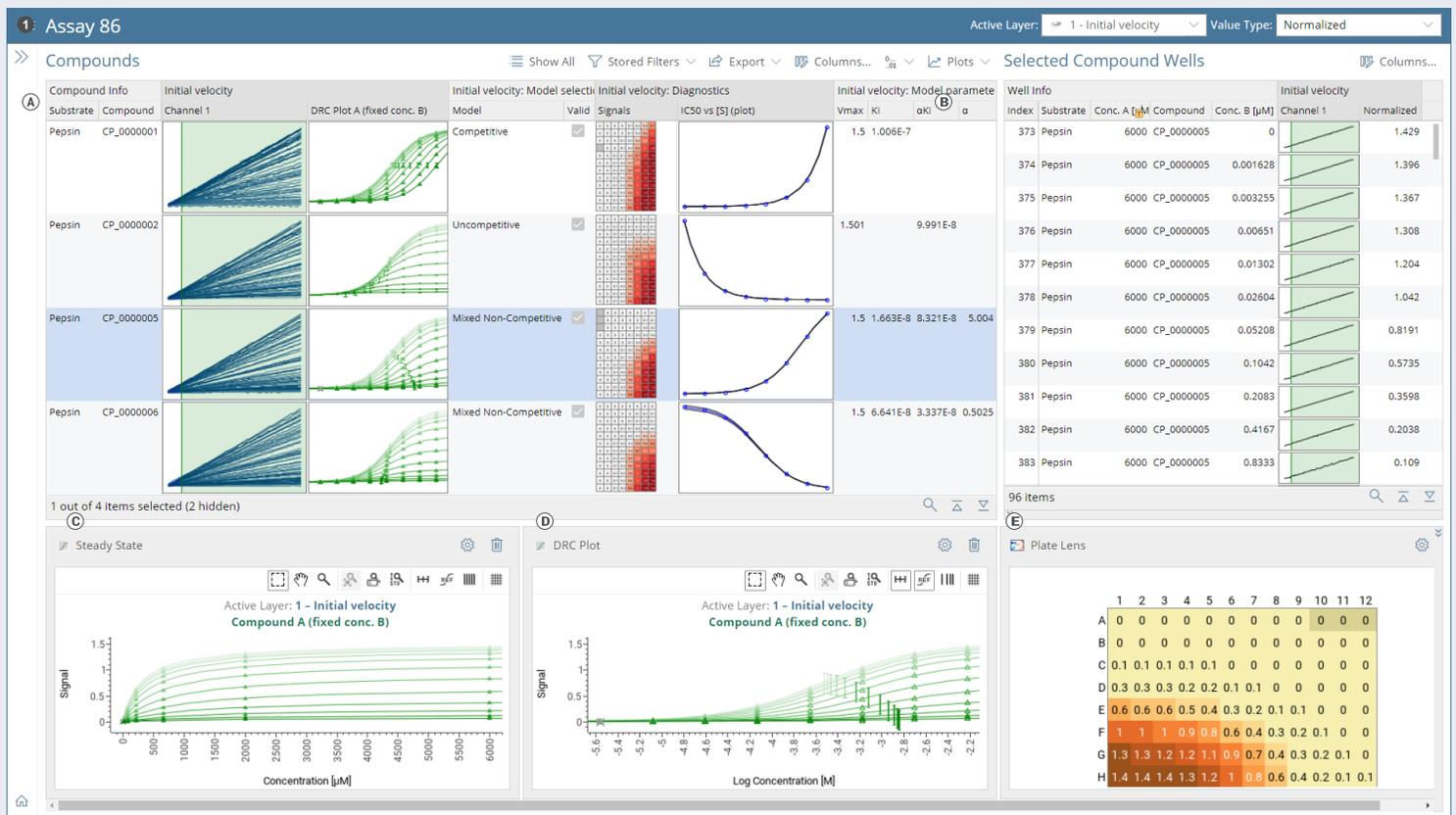
Screener for Mechanistic Analysis is designed to import the raw data from instruments providing kinetic information,

analyzing binding curves from all your instruments in the same workflow. The software provides technology-specific methods and allows easy comparison between experiments. You can store original data and results centrally, automatically propagate them to your corporate data warehouse, and browse through all results from all experiments at sufficient detail from any corporate location.

Screener for Mechanistic Analysis brings full integration of your mechanistic data into your research process, helping decision makers everywhere make better decisions.

### Consistent Results

With Screener, data reliability increases. The automatic



1 A modality of inhibition experiment in Genedata Screener.

A The Compound Table displays the analysis results, which are based on fitted modality of inhibition. The model is automatically selected by Genedata Screener based on the data, but can also be manually overwritten by the user. Fit results include model validity, Km, Vmax, Ki and αKi. B The table shows the calculated slope of the progress curves for the selected compound wells. C, D The plot shows the fitted dose response curves. The points correspond to the calculated slopes and each curve stands for a fixed inhibitor concentration. The concentration axis is displayed in linear and logarithmic units respectively. E The plate lens shows the calculated slope for each well. It gives a graphical representation of the response over the dilution series.

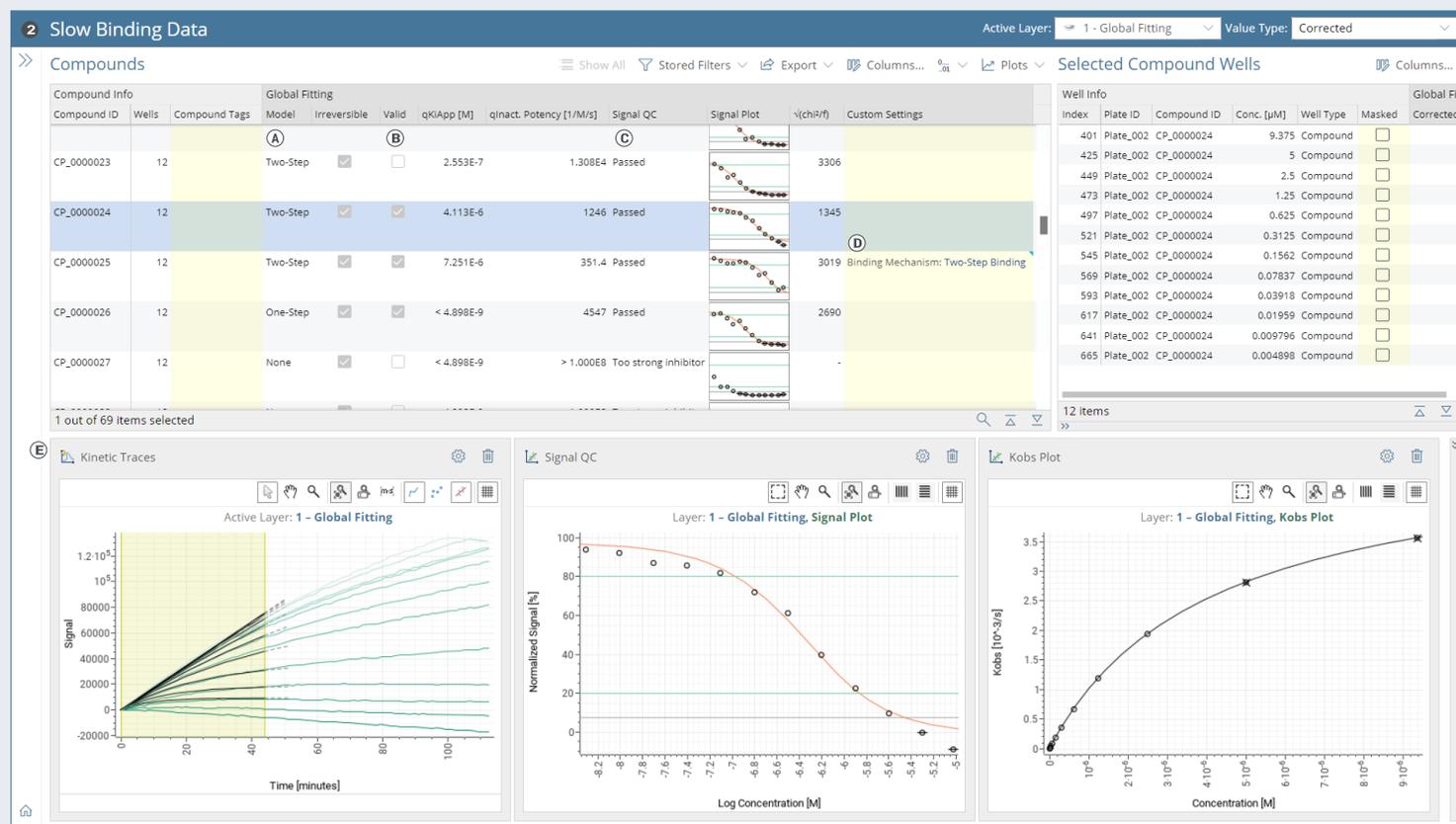
transfer of all mechanistic data eliminates manual cut and paste errors that easily occur when using spreadsheets. Following the automated data import, the analysis workflow is also set up to be consistent, so that all results are comparable between experiments, regardless of who has performed the analysis.

In addition, best-practice calculations and methods specifically designed for mechanistic analysis are available directly from the interface, ensuring that the same best-practice methods are used for all applicable analyses across the company.

## Flexible Analysis

The correct balance between automation and flexibility is sometimes difficult to achieve. Genedata Screener solves this challenge by offering full automation combined with in-depth diagnostics, review, and re-processing options. Binding curves can be viewed next to final results and processing steps found sub-optimal can be adjusted interactively. New calculation methods can be added or edited by the user based on findings during the analysis.

This balance between automation and interactivity allows you to efficiently achieve high quality results that you can immediately share (including raw data) with your colleagues and collaborators.



### 2 Slow Inhibitor Binding Experiment

- Ⓐ Automatic QC of raw signal to detect flawed measurements. Ⓑ Automatic model selection and result validity check. Ⓒ Possibility to manually overwrite the results of the automatic analysis.
- Ⓓ Diagnostic plots to review the data and fit quality

## Fast and Scalable

Desktop applications can work well when analyzing data at lower volumes, but as soon as experiments increase in number or size, these analysis methods do not scale.

With Screener for Mechanistic Analysis, the analysis of 50 compounds is as quick as the analysis of 5. Data loads and processes in seconds and views reload instantly. Method or data corrections are immediately implemented across the entire data set and high-level overviews allow you to easily review complete experiments.

All this enables time savings of up to 80% when going from spreadsheets and manual analysis to Genedata Screener.

## Built-in Business Logic

Screener for Mechanistic Analysis builds on the proven screening analysis and workflow logic of Genedata Screener. Along with direct integrations with instruments used for mechanistic analysis, methods are included for applications such as kinetic probe competition assays (kPCA), kinetic analysis with one or two-step binding or reversibility, and competitive/non-competitive/uncompetitive modalities of inhibitor binding.

The open infrastructure of Genedata Screener also allows you to implement company-specific processing methods and business rules, so that you can always choose the optimal way to analyze your data.

## Solution of Choice

The world's top pharma and contract research organizations rely on Screener for a streamlined analysis. Screener manages massive as well as complex data sets, and uncovers relevant information with powerful analysis methods.

Screener for Mechanistic Analysis complements existing R&D data analysis pipelines, addresses challenges specific to this domain and feeds results back into the main discovery data stream. Furthermore, Screener makes the results accessible beyond the screening laboratory.

Supporting all in vitro screening, Genedata Screener improves screening productivity, eliminates redundancies, and drives innovative research.

### GENEDATA SOLUTION



Genedata Screener® captures data from all assays, regardless of therapeutic modality or area. It automates analysis of even the most complex assays, on a single platform and in a harmonized manner, to ensure high result quality and better decision-making. © 2021 Genedata AG. All rights reserved. Genedata Screener is a registered trademark of Genedata AG. All other product and service names mentioned are the trademarks of their respective companies. 04S22

### GENEDATA

Genedata transforms data into intelligence with innovative software solutions incorporating extensive domain knowledge. Leading biopharmaceutical organizations rely on Genedata to digitalize and automate R&D processes. From discovery to clinic, Genedata solutions help maximize the ROI in R&D. Founded in 1997, Genedata is headquartered in Switzerland with offices around the world.

### EXPERIENCED PARTNER

With more than a decade of experience in industrial screening data analysis and global enterprise deployments of Genedata solutions, Genedata is an ideal collaboration partner for companies wanting to advance their operations. In addition to the steadily evolving solution platforms, Genedata offers extensive opportunities for custom or co-development of specific new functionalities, procedures, or methodologies to support your current and future needs.

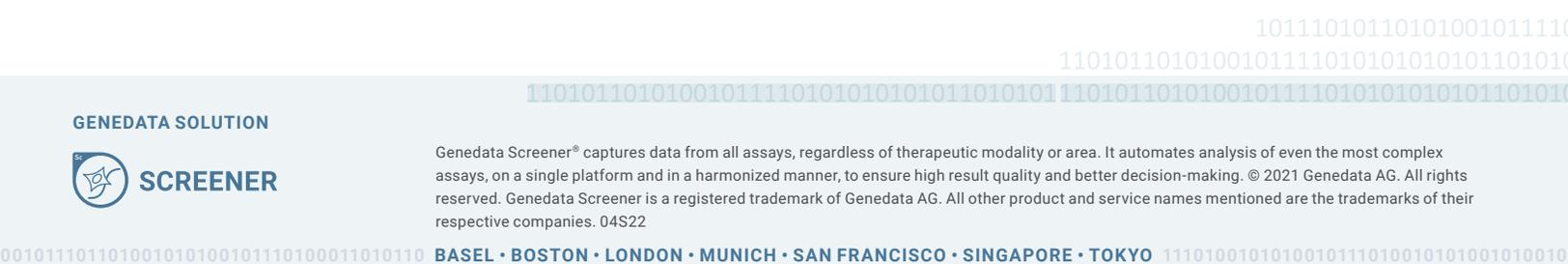
### SERVICES AND SUPPORT

Genedata offers a range of services and support, from installation and customization to global rollout 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](http://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](mailto:screener@genedata.com).



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