

Drug research strives for a full assessment of hit and lead compounds as early as possible in the discovery process. Thus, there is a need to conduct more complex experiments and to compare results from complementary or orthogonal assays and technologies. Genedata Screener Hit Profiler allows review of data sets consolidated from related assays together with systematic assessment of compound bioactivity and pharmacology across assays. The software helps identify promising molecules and structure classes from sets of assays, across technologies, focusing on biological relevance and ensuring that only the most promising compounds are selected for further studies.

Collect and Consolidate

A single screening campaign often contains data derived from many different, orthogonal assays or from multiple runs of the same assay. Screener makes sure that all these data can be gathered in one place, in an easy and automated way. Bring together all results from any experiments stored in the Screener Database (Figure 1), using simply the name of the relevant experimental sessions or—even more simply, if you have our *Assay Catalog*—querying for a given assay. As a project progresses, Screener makes sure that your result overview stays up-to-date with the latest analysis results.

Add Data ¹

Assay ID AID-10120, AID-10130, AID-10...

Last Update

Match All

Restrict to Analyzer Sessions with:

Only Show Analyzer Sessions with Mapped Results

Analyzer Session								
	Name	Assay ID	Mapped Results	Assay Name	Last Update	Description	Analyzer Template	Created
<input checked="" type="checkbox"/>	Assay 12	AID-10120	<input checked="" type="checkbox"/>	Assay 12	2021-05-21 15:05:44	DRC, FRET, replicates	Assay 12 /Tests	Demo
<input checked="" type="checkbox"/>	Assay 13 Primary	AID-10130	<input checked="" type="checkbox"/>	Assay 13 Primary	2021-05-21 15:06:14	Primary Screen, Fluorescence	Assay 13 Primary /Tests	Demo
<input checked="" type="checkbox"/>	Assay 32	AID-10320	<input checked="" type="checkbox"/>	Assay 32	2021-06-02 10:17:06	DRC, TSE, FLIPR	Assay 32 /Tests	Demo
<input checked="" type="checkbox"/>	Assay 32 - Run 1	AID-10320	<input checked="" type="checkbox"/>	Assay 32	2021-06-02 10:30:08	DRC, TSE, FLIPR, for HP session	Assay 32 /Tests	Demo
<input checked="" type="checkbox"/>	Assay 32 - Run 2	AID-10320	<input checked="" type="checkbox"/>	Assay 32	2021-06-16 13:41:39	DRC, TSE, FLIPR, for HP session	Assay 32 /Tests	Demo
<input checked="" type="checkbox"/>	Assay 75	AID-10750	<input checked="" type="checkbox"/>	Assay 75	2021-06-11 08:23:37	SPR, Octet, without regeneration	Assay 75 /Tests	Demo

6 out of 6 items selected (58 hidden)

Exclude Unlisted Compounds Exclude Invalid Results

¹ **Rapidly Compile and Summarize Results in Hit Profiler**
Compile results using experimental session ID or Assay ID. Results pertaining to the same compounds are automatically aggregated, and query or viewing settings can be saved for later use

Compare and Decide

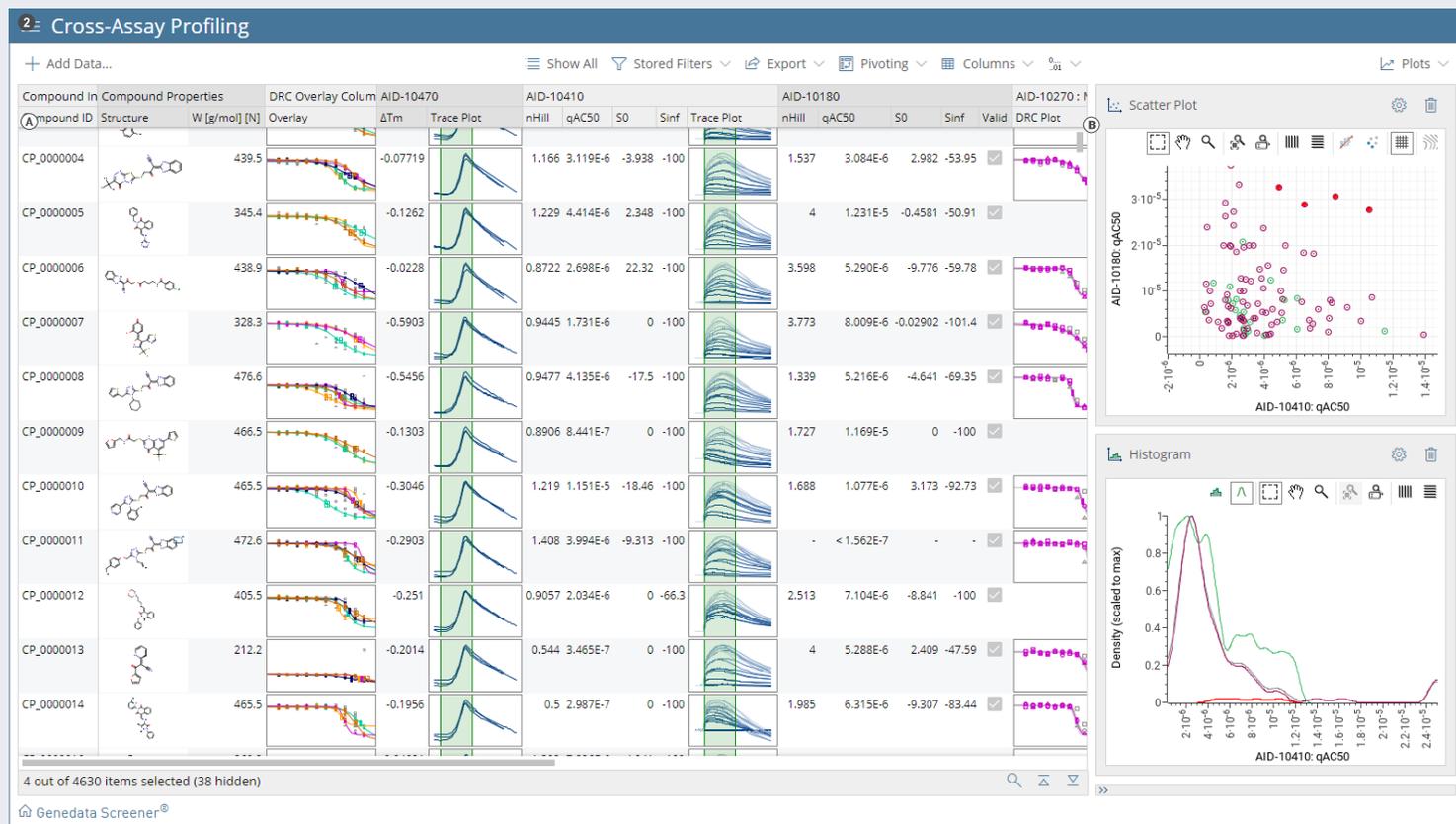
After having run a series of parallel or orthogonal tests using different technologies, it is essential that the results can be easily compared. Screener can fetch and align results and quality metrics from greatly disparate technologies, e.g. fit results or other numerical data, dose-response curves or kinetic traces. Also add columns with computations or curve overlay plots based on results from across experiments. All the information is presented side by side in **Hit Profiler** (Figure 2) making compound progression or project decisions much more efficient and reliable.

If you want not only to compare results but to dynamically re-analyze or optimize your processing settings across similar

experiments, ask us instead about our Reference Assay module.

Sort and Summarize

With a lot of data, a simple overview is sometimes not enough. To make sure that you can focus on the relevant results, Screener offers a number of tools to help with data mining. Create summary histograms and scatter plots of data across experiments, from which you can quickly select groups of results with similar properties, then group or hide these. For complex experiments involving multiple conditions per compound, use one-click pivoting to view results by compound or by condition. With multiple-column sorting you can sort for several features at once. Filtering



2 Compound-Centric Profiling in Hit Profiler

All results side by side. View compound results from multiple assays and information sources on one screen and apply calculations or filters. For example: (A) View compound information such as structures and molecular weight next to dose-response curves and fit results, calculated correlations, or kinetic traces. (B) Get quick overviews and select groups of results using flexible filters, histograms, or scatter plots.

offers even more advanced opportunities to find just the right compounds. Save queries and viewing settings, so you won't have to spend time arranging views whenever you come back for another look.

Compound Profiling

With Genedata Screener you can review compound results across a set of related assays, or systematically query and assess compounds across technologies and over time. If you are a screening scientist working within a screening project, this helps create reliable and scientifically sound hit lists for follow-up experiments, for example during counter-screens or comparative selectivity studies. If you are part of a cross-functional team within a lead identification or optimization project, this allows you to look at correlations between compound structure, biophysical properties, and activity. Either way, you can identify and select promising compound classes for further optimization.

Share

When you have a final hit list, you can easily generate reports in a range of formats to share with project stakeholders: export entire spreadsheets into Excel or text formats, export individual plots as images for presentations and reports, or share links to live sessions. In addition, load and view compound properties and structures into your report.

Solution of Choice

The world's top pharma and contract research organizations rely on Screener for a streamlined analysis. Screener manages massive, multi-featured campaigns, and uncovers relevant features with powerful analysis methods. Interactive navigation enables inspection and optimization of results.

With a small footprint and easy setup, Screener for Compound Profiling complements existing R&D data analysis pipelines. Furthermore, it makes discovery results accessible beyond the screening laboratory.

Supporting all plate-based 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

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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.

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