

101110101101010010111101  
110101101010010111101010101011010101  
101110101101010010111101

# Genedata Screener®

## Assay Catalog



00011010111011000110



**Assay Catalog**

ID	Assay Name	Description
(AID-10380)	Assay 58	Metabotropic glutamate receptor 2 (mGluR2) FRET validation assay
(AID-10370)	Assay 57	Lipophilicity assay
(AID-10360)	Assay 56	Solubility assay
(AID-10350)	Assay 55	Neurospine clearance assay
(AID-10480)	Assay 49	SPR (Biacore) Multi cycle
(AID-10460)	Assay 48	IKK Inhibitor screen
(AID-10470)	Assay 47	ATP Thermal Shift Assay
(AID-10420)	Assay 42	Non-2 Time resolved FRET
(AID-10415)	Assay 41 - Hyperpolarization	Ca <sup>2+</sup> Calcium influx FRET
(AID-10410)	Assay 41 - Depolarization	Ca <sup>2+</sup> Calcium influx FRET
(AID-10390)	Assay 39	100% HCV RNA dependent
(AID-10320)	Assay 32	Metabotropic glutamate receptor
(AID-10300)	Assay 29	IL-1 Induced GDMF protein
(AID-10270)	Assay 27C	Erb B2 receptor tyrosine kinase
(AID-10210)	Assay 21	Metabotropic glutamate receptor
(AID-10185)	Assay 18D	Trigonellin receptor
(AID-10180)	Assay 18C	Trigonellin receptor

**Edit Assay: AID-58** State: Active

Short Name: Assay 58a  
Assay Title: Metabotropic glutamate receptor 2 (mGluR2) FRET validation assay

Assay Information

- Assay Description: Define multiple result sets
- Assay Attachments
- Assay Annotations
- Assay Results
- Sub-Experiments
- Experimental Conditions
- Annotation Scheme

Result Set: Agonism

- Nanion IV Analysis (Data Mode, Description, DRC Plot, nHill, qACSO, SO, Sinf, Sweep Analysis Plot, Valid)
- Nanion Sweep Analysis (Data Mode, Description, DRC Plot, CLint, Half life)
- DMPK Clearance (Clearance Plot, CLint, Half life)
- DMPK Lipophilicity (Buffer Plot, LogD, Lipophilicity - Octanol Plot)
- DMPK Solubility (Example Plot, Solubility - Standard Plot)
- Dose Response (Data Mode, Description, DRC Plot, nHill, qACSO, SO, Sinf, Valid)
- Dose Response Kinetic (Data Mode, Description, DRC Plot, nHill, qACSO, SO, Sinf, Trace Plot, Valid)
- Epitope Binning (Activity, Bin ID, Calculated Bin ID, interaction Type)
- Dose Response Kinetic (Data Mode, Description, DRC Plot, nHill, qACSO, SO, Sinf, Trace Plot, Valid)

Assay Mode of Action:

OK Cancel

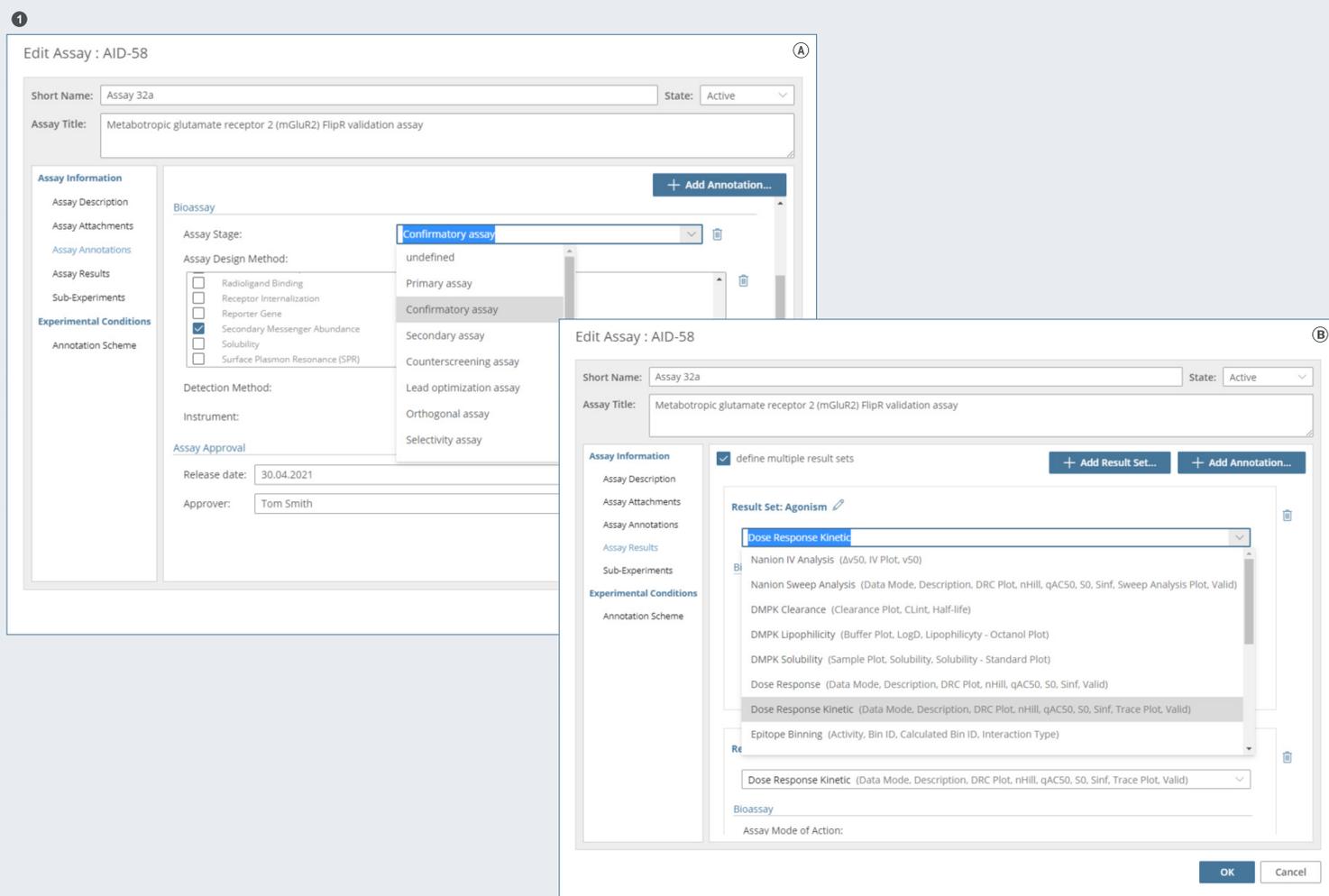
00101011011  
00101011011

Genedata Screener Assay Catalog helps scientists to provide biological context for both simple and complex screening results, ensuring that all experiments are annotated with rigor and consistency. By standardizing the context description on the corporate level, Assay Catalog ensures that every result is sufficiently characterized before it is uploaded to the data warehouse. Consequently, Assay Catalog gives project teams across the organization access to experimental information via biologically-informed queries and facilitates the interpretation and consolidation of results across experiments, for better decision-making. Moreover, the structure and machine-readability rendered by Assay Catalog opens the possibility of future, AI-assisted downstream analyses.

Assay Catalog is an out-of-box, fully-supported solution that evolves with the adoption of new assay technologies, making for an easy-to-implement, long-lasting data management system that enhances efficiency and productivity in drug discovery research and development.

### Unified Assay Inventory

Assay Catalog gives your organization the means to structure and provide biological context for your experimental data. It registers each assay with a unique ID, name, assay protocol, and a set of assay annotations and expected result types (Fig. 2). It associates all assays with standard ontology and terminology, in a consistent fashion. With these curated assay definitions compiled in a single,



1 Consistent Usage of Corporate-Wide Annotations and Screening-Relevant Result Types

A Assay Catalog structures the annotation of assays using a controlled yet configurable vocabulary. Types of annotations include lists, dates, text or numbers, covering diverse needs across the industry. B Assay Catalog allows the selection of relevant result sets from a pre-defined list. In presence of multiple result sets, specific annotations can be added as well.

central location, Assay Catalog serves as an easy-to-use, valuable resource for the entire R&D organization.

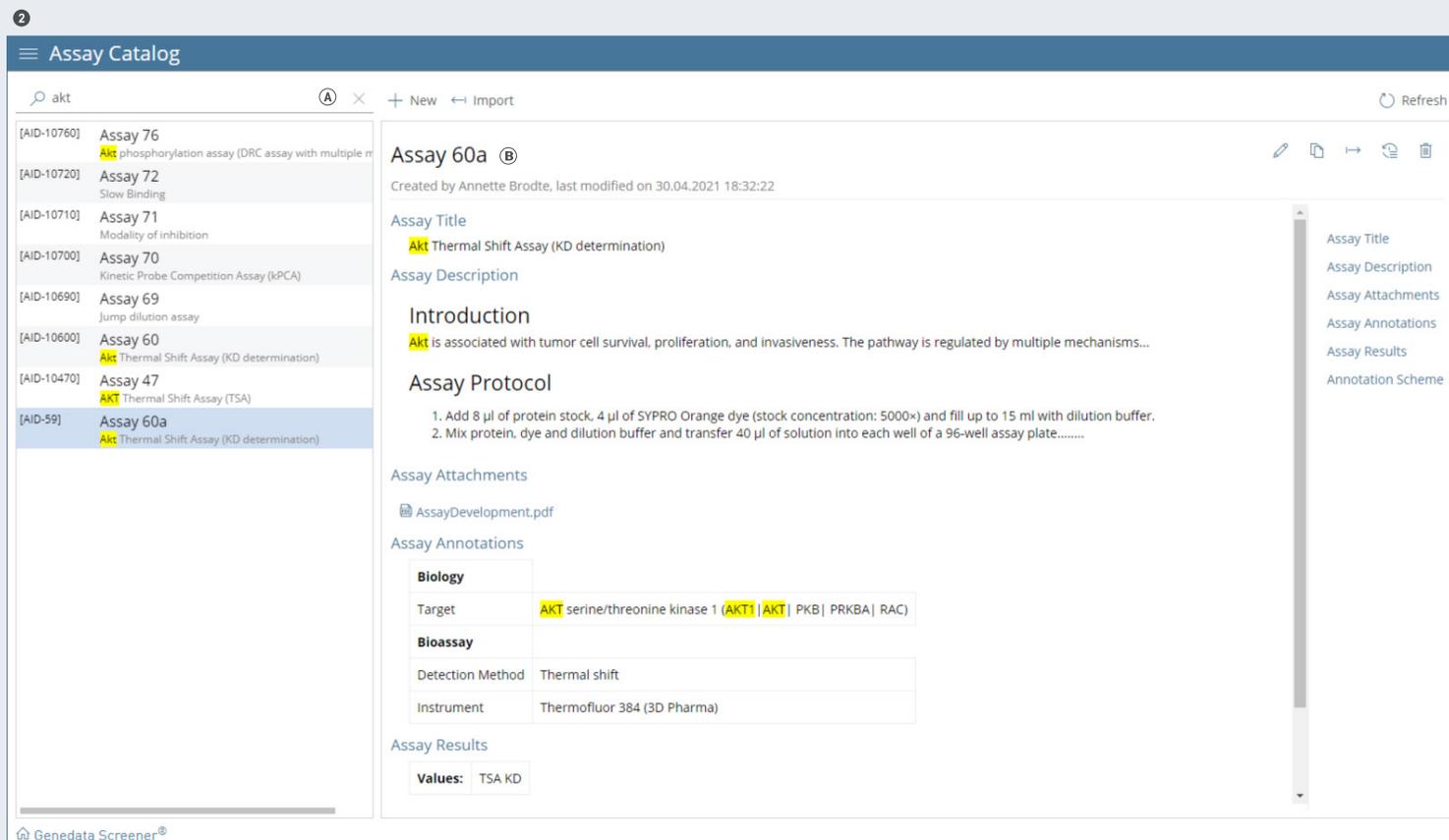
### A Seamless Workflow

Assay Catalog comes with configurable ontology and annotation schemata that can be adapted to an organization’s own needs and policy. Once these are set, scientists themselves register assays by defining the biology and conditions of an experiment, the protocol, and the associated result types prior to measurement. Then, after experimental data is recorded, Screener Analyzer links it directly to the assay in Assay Catalog, so that upon its generation, every result is connected to its biological context, ensuring it is traceable and interpretable. Having the assay

information already present during analysis helps ensure appropriate analysis decisions.

### Complex Assay Capture

Assay Catalog makes it simple to define formats of and annotate data from modern assays. This includes biochemical and cell-based, biophysical, and phenotypic assays that generate multiparametric or time-resolved data. It also includes experiments with more sophisticated designs and multiple conditions, such as cell panels. With Assay Catalog, the complex results of such assays are easily mapped for later interpretation. Importantly, unlike static in-house systems or out-of-date legacy systems, Assay Catalog is continuously maintained and developed by time-



② Enterprise Compilation of Assay Descriptions

Ⓐ The full-text search option on assay names, descriptions and annotations, allows scientists to easily find the information they need. Ⓑ Each assay is identified by a unique ID and features an assay name, a structured set of assay annotations, and the expected result types for the assay. One can also further describe the assay using an assay protocol in free-formatted text or by attaching files.

tested, expert scientific and software teams at Genedata. This guarantees that Assay Catalog will evolve with the latest approaches and technologies in drug research and development, providing out-of-the-box support for today's experimental reality.

## Intelligent Querying

Assay Catalog gives a coherent structure and definition to the expected results of assays, so that experimental data can be linked, found, and easily compiled by scientists or consumed by automated and AI-supported downstream analysis systems. Results from different experiments or screening batches can be automatically categorized and consolidated by assay; the comprehensive description of experimental results enables their efficient and automated retrieval. Since Assay Catalog links all assays to standard terms, queries across assays within and across projects are easy to perform. This yields results with a clear and consistent meaning, creating a foundation for better project decisions.

## Maximized Efficiency

Assay Catalog maximizes operational efficiency and reduces costs. Because it consolidates and harmonizes information and makes it accessible across the organization, Assay Catalog eliminates potential redundancies and prevents unnecessary duplication of research efforts. Implementing and maintaining Assay Catalog requires minimal effort: it comes with a basic set of annotations and result types, providing a built-in basis from which you can quickly launch a full data management system. Its standardization, flexibility, and intuitive interface makes adopting new assay formats

rapid and simple, without requiring a system overhaul. Assay Catalog also streamlines user management, by allowing designated users to independently register assays, therefore keeping control while reducing administrative burden on IT teams.

## Future-Proofness

Over time, research processes evolve and so do corresponding assay protocols. For minor changes, which have no impact on the comparability of results, assays can be just be modified. Traceability is ensured by a clear versioning concept. For major changes, new replacement assays need to be created. Phased out assays and result types can be inactivated, to ensure backwards compatibility and at the same time reduce risk of errors.

## Solution of Choice

As research organizations grow, better data management stewardship becomes more important than ever. Thanks to the standardized terminology, rich metadata and searchability that Assay Catalog provides, it helps promote best practices such as findability, accessibility, and reusability by all stakeholders. It also encourages proper and complete data reporting to corporate warehouses, due to its seamless integration with Genedata Screener and its Reporting APIs.

By using Assay Catalog, biopharmaceutical companies and research enterprises everywhere can better collect, document, trace and manage all assay results, enhancing data quality, adding value and facilitating more optimal decision-making.

### GENEDATA SOLUTION



Genedata Screener® is part of the Genedata portfolio of advanced software solutions that serve the evolving needs of Biopharma R&D. © 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. 06S21

#### 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).



001011011010010100101110100011010110 BASEL • BOSTON • LONDON • MUNICH • SAN FRANCISCO • SINGAPORE • TOKYO 1101001010100101110100101001010010