



Signals Notebook Data Sheet

Collaborate across multidisciplines in leading SaaS ELN (Electronic Lab Notebook) to accelerate R&D

Used by more than 1 million scientists and powered by ChemDraw, Signals Notebook is a collaborative, cloud-native electronic lab notebook (ELN) serving chemists, biologists, formulators, and others in pharmaceutical, biotechnology, chemical, agrochemical, flavor and fragrance, and oil & gas Research and Development.

Equipped with a modern, intuitive ELN delivered as software-as-a-service (SaaS), scientists recover more scientific quality time for creativity as they work more productively and collaboratively in a shared, secure data management environment. Signals Notebook speeds users to insight, fosters collaboration, and improves decision-making to accelerate scientific innovation.

Experiment Contents

- Overview
- Abstract
- Equipment
- Bio Reagents used for cloning
- UniProt
- Cloning
 - Original Plasmid
 - Primer
 - Insert
 - Expression Vector
- Transfection
 - Parent Cell Line
 - Transfected Cell Line

Equipment

ID	Type	Manufacturer	Application	Comments	Date Used	Model
E-0050-01	PCR Thermal Cycler	Qiagen			Jun 15, 2023, 12:00 AM	QiAmplicon® 96 thermal cy
E-0011-01	Pipette	Gilson			Jun 15, 2023, 12:00 AM	P100
E-0068-01	Centrifuge	Eppendorf			Jun 15, 2023, 12:00 AM	5702
E-0010-01	Pipette	Gilson			Jun 15, 2023, 12:00 AM	P10
E-0096-01	Mixer (vortex)	IKA				Vortex 2
E-0011-01	Pipette	Gilson				P100
E-0015-01	Multimode plate reader	PerkinElmer				Envision
E-0025-01	Auto pipette	2Mag				gfdsgs

Bio Reagents used for cloning

Biological Reagents

Row Count: 3 (of 2000 limit)

Bulk Actions: ⌵

ID	Biological Reagent Name**	Originating Experiment	Submitter	Submission Date
BioReg-0004-01	Phosphate Buffered Solution (PBS)		Linda Kewitsch	Mar 27, 2023, 03:13 PM
BioReg-0027-02	Penicillin-Streptomycin		Jeff Kumer	Apr 19, 2023, 01:05 AM
BioReg-0026-02	Geneticin		Jeff Kumer	Apr 19, 2023, 01:02 AM

Figure 1. Example of a biology experiment set up in Signals Notebook. The equipment/materials tab are listed the various pieces of equipment and lab ware used in the experiment for easy tracking. Links to all biological reagents are aregistered.

Key Benefits of a Scientific, fit-for-purpose ELN:

- Chemical intelligence:** Signals Notebook's native ChemDraw integration makes recording of synthetic chemistry experiments (including combinatorial chemistry) a breeze. A materials management library and inventory tracking capabilities further complete the experimental chemist's tool set.
- Biological intelligence:** Easily record and track biological sequences, gels, plates, and associated protein expression data. Image annotations make your findings as clear as they need to be to help colleagues understand your results. Versioned, standardized SOPs further streamline bench work and experiments.
- Increased Productivity:** Designed with the user's needs in mind, Signals Notebook securely stores all your data, ensuring that it is safely accessible whenever and wherever it's needed. By simplifying the process of data handling and reducing the unnecessary duplication of experiments, it streamlines the conduct of research. With the help of templated workflows and worksheets, the generation of reports Signals Notebook further saves valuable time and resources. This allows researchers to focus more on what they do best - innovating and discovering.
- Security and Compliance:** Signals Notebook is a Cloud ELN that respects the importance of data security and access control in research. Its permissions-based experiment access ensures that only those granted access can view and edit a notebook's content, thus offering an extra layer of security, even when collaborating with external CRO partners. Furthermore, Signals Notebook provides a validation-ready platform, adhering to industry standards such as GxP and 21 CFR Part 11. This commitment to compliance not only safeguards the quality and integrity of the work but also gives peace of mind to the researchers, knowing their valuable data is secure and properly managed.
- Office 365 integration:** Signals Notebook integrates harmoniously with Microsoft Office 365 products, allowing Word documents, PowerPoint files, and Excel spreadsheets to be opened and modified directly within the notebook. This seamless integration streamlines the research process, enabling all relevant information to be accessed in one place, and making collaboration and data.



Figure 2. Example of a preview of a PowerPoint slide uploaded directly into Signals Notebook management simpler and more efficient. Uploaded MS Office documents are versioned and their changes fully captured in the audit trail.

A Comprehensive Solution for Laboratory Data Management:

Signals Notebook is designed to cater to the multifaceted needs of R&D scientists and presents unparalleled convenience for management of lab data. From planning your experiments to sharing your findings, Signals Notebook equips you with a suite of capabilities that streamline your research process.

At the core of this modern ELN is an intuitive drag-and-drop approach that handles all types of data and files. This seamless interface enhances the user experience by allowing quick organization of complex data. In addition, our advanced search capabilities let you easily find textual and chemical content within the platform, ensuring that no crucial information is ever out of reach or lost and forgotten.

Upload and annotation of images is natively supported with Signals Notebook to add contextual insights to pictures and enhance the clarity and comprehensibility of your research data. Lastly, libraries of custom entities (chemicals, equipment, samples etc.) can readily be created and managed, offering a highly customizable and organized system for your all your research data management needs.

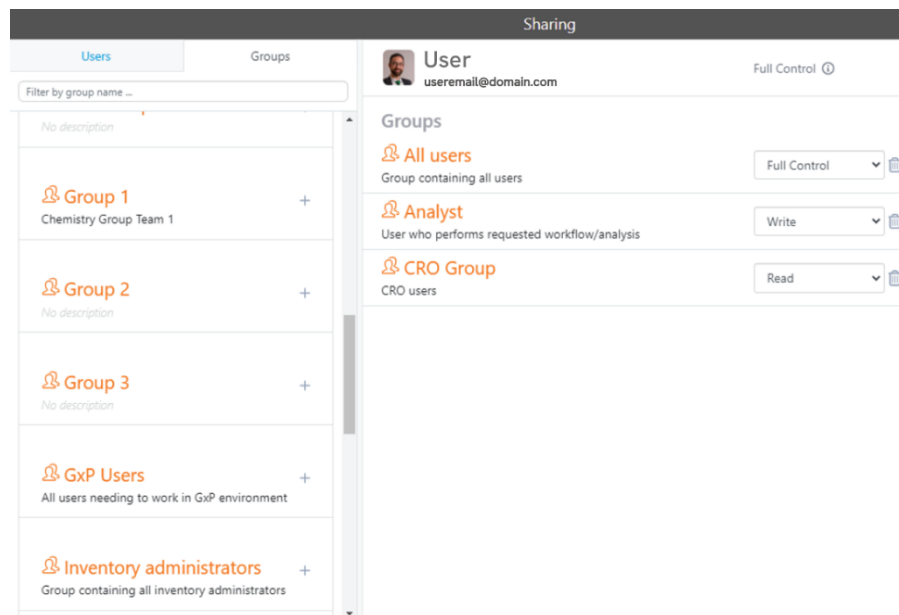


Figure 3. An example of experiment sharing options available within Signals Notebook. Individual users or groups can be given multiple types of control over an experiment. Role-based user access is defined at an admin level.

Interactive, Collaborative, and Secure

Signals Notebook is much more than a data storage system. It was designed to foster interaction and collaboration in a manner similar to popular social media apps. Commenting, notifying, and updating are made as simple as in everyday life apps, enabling you to maintain fluid communication with your team.

In addition, system registries are easily updated, ensuring that records are always up to date. This further helps the proper retention of data to fully support any intellectual property claims, and provides a robust and secure platform for your innovative work.

To ensure the integrity of your research, and when needed, Signals Notebook allows for the enforcement of procedures and SOPs (Standard Operating Procedures) through the use of locked worksheets. Thanks to those worksheets, teams can adhere to previously defined methodologies, guaranteeing that results are consistently valid and reliable.

Signals Notebook also enables real-time global collaboration, making geographical boundaries irrelevant. Now, your research team can work together seamlessly, no matter where they are in the world. With Signals Notebook, your laboratory data management is not only simplified but revolutionized.

Exploring the Advanced Features of Signals Notebook

Signals Notebook brings together a vast array of scientific workflow capabilities that prioritize data security and integrity, as well as efficient materials and task management. It offers application programming interfaces (APIs) to ensure effortless data integration with a range of data sources and third-party applications.

Recent activity for NK-162-CHEM1364

Filter



User Name
useremail@domain.com

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Jun 27, 2023, 9:43:35 AM



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Edited Chemical Drawing Reaction

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Jun 27, 2023, 9:38:49 AM




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Jun 27, 2023, 9:38:50 AM

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Reaction No description



Reactants

Rxn ID	Reactant	CAS Numt

The current version was created at Jun 27, 2023, 9:49:41 AM


Reaction No description



Reactants

Rxn ID	Reactant	CAS Numt

Figure 4. A screenshot of an audit trail for a Signals Notebook Chemistry experiment. Each individual action is logged and tracked. For each action, it is possible to compare side-by-side the current/previous versions. In this example the chemical reaction was modified to add a reactant (version on the right). Changed within MS Office document (Word, Excel, Powerpoint) are trackable in a similar manner.

- **Audit Trail:** Signals Notebook enables full accountability with a thorough, secure and comprehensive audit trail. Users are clearly designated and their actions identifiable for each experiment action/task requiring review or approval. Only authorized individuals can access and sign off on completed tasks. This level of detail provides a complete audit trail for all notebook activities, offering a clear and reliable record of progress.
- **Materials Inventory:** The inventory management system in Signals Notebook is designed for convenience and efficiency. It allows for effortless tracking of materials, substances, solvents, and chemical or biological compounds, and provides precise information about their storage location. Barcodes can be used to track substances, providing a clear picture of in-house availability and the need for order/reorder. It also tracks the amounts used in each experiment, and facilitates the addition of newly synthesized compounds or purchased substances to the inventory.
- **Task Request Workflow:** Signals Notebook enables the creation and assignment of specific tasks, fostering a controlled and organized workflow. From analysis of samples to requests for conducting specific experiments the Task/Request workflows in Signals Notebook are a cornerstone of multi-disciplinary collaboration capabilities.
- **Security:** Security is a key focus of Signals Notebook, which provides a secure cloud environment. Access to the tenant and experiments is limited to authorized individuals, and control features can only be adjusted by those with system administration privileges. This secure approach extends to collaborations with Contract Research Organizations (CROs) and Contract Development and Manufacturing Organizations (CDMOs), ensuring that access to experiments or features is appropriately controlled.
- **Integrations and REST APIs:** Signals Notebook offers REST APIs for the development of connections and data integrations with third-party applications and services. This feature promotes efficient data aggregation, and makes data, experiments, and results more organized and easily searchable. It helps to reduce the repetition of experiments and supports the principles of reproducible science.
- **GxP Validation:** Regulatory compliance is an integral part of Signals Notebook's design. It is compliant with 21 CFR Part 11, adhering to the guidelines established by the U.S. Food

and Drug Administration (FDA) for electronic records and electronic signatures. In addition, Signals Notebook supports Good Practices (GxP) validation in its deferred release versions, ensuring the quality, safety, and efficacy of products and services throughout their development lifecycle, from research and development to manufacturing and distribution.

Revolutionize Your Research with Signals Notebook

Signals Notebook is a game-changer in laboratory data management. Its impressive array of advanced scientific and non-scientific features, including secure audit trails and effortless third-party integrations, creates a comprehensive platform that simplifies experiment creation, fosters collaboration, and accelerates research. With a strong focus on security and regulatory compliance, it safeguards data while offering peace of mind, enabling scientists to concentrate on their core mission: advancing innovation and discovery.

More than an electronic lab notebook, Signals Notebook is a research partner. Its efficient task request workflows, comprehensive materials inventory management, and seamless integration with Microsoft Office 365 products optimize the research process. Whether for a small research team or a global organization, Signals Notebook is the solution for managing lab data, promoting collaboration, and pushing the boundaries of scientific exploration. With its unique integration of ChemDraw, including advanced biopolymer support improvements, it takes chemistry AND biology research experience to a whole new level, making it the preferred choice for scientists across scientific research disciplines.

[FREE TRIAL](#)

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<https://revvitysignals.com/products/research/signals-notebook-eln>



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