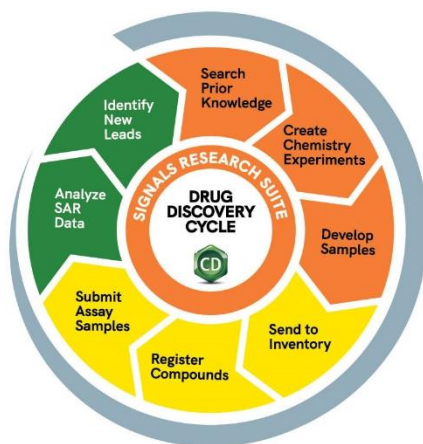


Signals Notebook for Discovery Chemistry

Give back more scientific quality time to chemists, and increase chances of drug discovery success

Revvity Signals Notebook, integrated with the industry-standard ChemDraw, provides chemists involved in drug discovery with an intuitive, cloud electronic lab notebook (ELN) that streamlines data management, promotes collaboration, and enables rapid insights to accelerate innovation and discovery.

Chemists involved in drug discovery are challenged by an abundance of data, a lack of integrated tools, and ever-shrinking time for creative scientific exploration. More than a productivity tool, Signals Notebook speeds users to insight, fosters insightful collaborations, improves decision-making, and accelerates discovery.



Signals Notebook- The Starting Point for Drug Design in the Signals Research Suite

Signals Notebook is part of the Signals Research Suite that is powered by ChemDraw, the chemical communication solution and TIBCO® Spotfire®, the leading visual data analytics software. By combining all the software applications needed for the Make-Test-Decide drug discovery cycle in one integrated platform, Signals Research Suite helps discovery chemists improve research efficiency and uncover unforeseen insights. This ultimately improves the success rate of drug discovery projects and hence the likelihood of bringing novel drugs to market.

The only ELN with Native ChemDraw Integration

Experience the unmatched benefits of integrating the industry's gold standard chemical drawing and communication solution, ChemDraw, directly within the Signals Notebook. This native ChemDraw integration transforms Signals Notebook into a chemistry-intelligent platform, offering a wide range of advanced features such as:

- Automated Stoichiometry Calculations and Auto Text:** Signals Notebook automatically populates stoichiometry tables, adjusts calculations based on reaction stoichiometry and number of equivalents, providing appropriate units of measure, and ensuring accuracy in experimental data. Updated amounts from the stoichiometry table are automatically updated in the written experimental procedure.
- Comprehensive Search Functionality:** Users can search for chemicals using their CAS Number, structure, or name. Additionally, Signals Notebook offers full access to PubChem material safety data sheets, and a wealth of other valuable resources, simplifying the process of finding and referencing essential information.
- Multiple structural formats:** Create drawings of structures and reactions by simply pasting SMILES strings or drag and drop ChemDraw or .mol files directly into the canvas. Researchers get greater flexibility in visualizing and handling chemical structures.
- ChemACX Explorer** enables searching for chemical supplier information and chemical property exploration for compounds that are commercially available as well as CAS Registry number search to find chemical structures. Those chemicals can then directly be added to an experiment reaction scheme

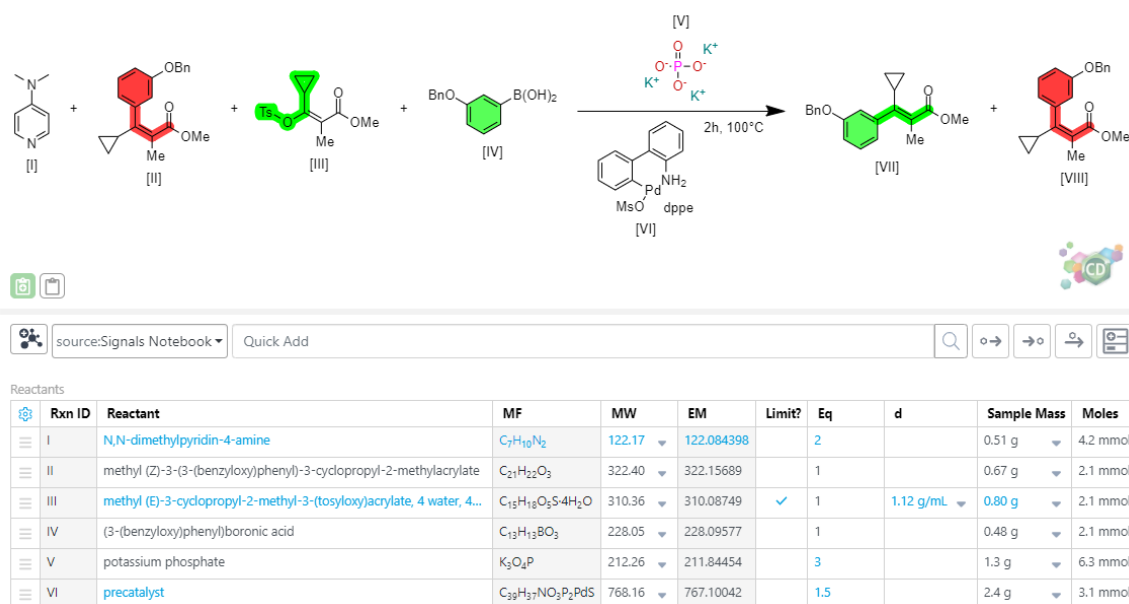


Figure 1. An example of a coupling reaction drawn with ChemDraw in Signals Notebook and its corresponding, automatically populated stoichiometry table.

0.5 µg/lane, 8 cm length gel,
1X TAE, 7 V/cm, 45 min

Experiment Contents

- Overview
- Equipment
- Cloning
- Transfection
- Parent Cell Line
- Transfected Cell Line
- Samples Table
- Expression
- Growth Medium Prep

Tasks >

Row Count: 3 (of 200 limit)

Bulk Actions

	Status	Task ID
<input type="checkbox"/>	Submitted	Task-001409
<input type="checkbox"/>	Submitted	Task-001410
<input type="checkbox"/>	In Progress	Task-001411

Create Tasks

Task-001410

Notebook: LK-104

Status: Submitted

Task ID: Task-001410

Task Type: In Vitro Enzymatic IC50

Reference ID: S003630, S003631, S003632, PKI-0010

Required By: 6/22/2023, 12:00:00 AM

Request Link: LK-104-BIO2079

Status: Submitted

Attached Docs: 0

Creator: Linda Kewitsch
linda.kewitsch@perkinelmer.com

Created: 13 days ago 6/15/2023, 2:59:07 PM
Linda Kewitsch
linda.kewitsch@perkinelmer.com

Modified: 13 days ago 6/15/2023, 3:00:27 PM

Figure 2. An example of a biological task request within a Signals Notebook experiment, allowing for seamless cross-disciplinary collaboration. A simple hover over tasks immediately gives a glance of important sample information.

Support Chemistry/Biology Collaboration

Signals Notebook encourages real-time multidisciplinary collaboration with on-demand experiment-sharing within and outside organizations. As analytical methods progress through the drug development process, Signals Notebook supports workflows including and beyond pharmaceutical R&D. Synthetic, analytical, (bio)formulation, and (bio)process scientists and biologists working in areas from screening to preclinical and clinical development can now share the same ELN.

Their research and experimental needs are supported in Signals Notebook so they can share and exchange data in the same environment. This integration becomes more critical as more drug discovery methods and new modalities call for the input, analysis, and sharing of chemical data and structures, as well as biological peptides, proteins, viral vectors, sequence, and expression data.

As a productivity solution, Signals Notebook automates data capture and experiment note-taking, is user-friendly for data management, and natively integrates with Microsoft Word, Excel, PowerPoint, PDFs. Scientific papers, spectral scans, and more can be directly included in experimental procedures in the notebook.

Parallel Chemistry Experiments: Library Creation (Combinatorial Chemistry)

Added at customers' request, this ability to create sub-experiments within an experiment helps enumerate compound libraries and keep track of syntheses. Parallel experiments streamline the process and allow for efficient organization and management of complex synthesis projects. This feature is particularly useful in combinatorial chemistry, where numerous compounds are synthesized simultaneously to expedite the drug discovery process.

By facilitating the management of multiple reactions and conditions, Signals Notebook enables researchers to optimize their experimental design, compare results, and identify the most promising candidates for further investigation. The parallel experiments functionality empowers chemists to maximize productivity and accelerate the discovery of novel compounds, contributing to the development of new therapeutics.