



Arxspan Suite

- Streamline Your Collaborative Research Workflow with the Arxspan Suite of Products

Arxspan Offers A Line Of Cloud-Based Products For Management Of Research Data.

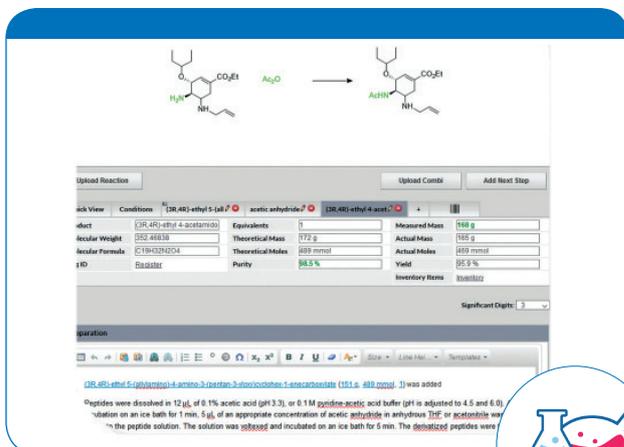
The Notebook product is a web-based Electronic Laboratory Notebook (ELN) solution built to serve as an authoritative repository for Chemistry and Biology data, optimized for the collaborative research models ubiquitous in today's commercial and academic research environments. It is highly effective at allowing organizations to collaborate and securely share research information with outside industrial partners, academic collaborators, and CROs. The system can deploy in one business day, includes experiment signing/witnessing capability and audit trails, is 21 CFR Part 11 compliant, and offers robust functionality to support chemistry and biology workflows.

Chemistry

- Compatible with PerkinElmer ChemDraw® for drawing and representation of chemical structures and reactions
- Integrated ChemAxon chemical intelligence underlying reactants and products in stoichiometry tables Chemical searching, parallel synthesis, defined vocabulary lists, CAS number lookups, compound tracking, reaction next-step functionality, and regulatory checks available

Biology

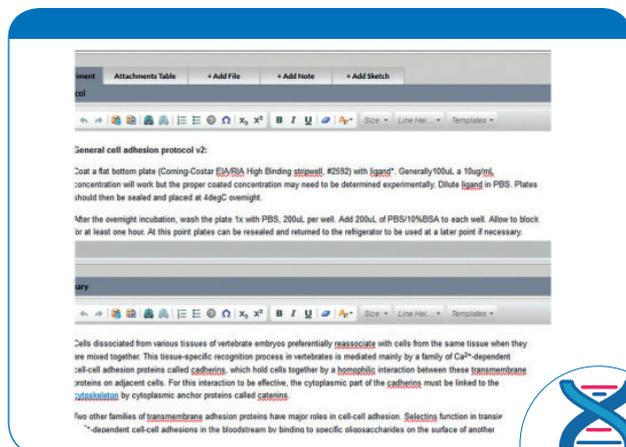
- Ability to attach files of any type: Microsoft Office, PDF, image, analytical, and instrument files
- Push-button PDF rendering of experiments for generation of comprehensive experiment reports
- Notes and comments can be added to experiments, images can be annotated, and common protocols can be templated for quick population of free text boxes in biology experiments



The screenshot displays a chemical reaction interface. At the top, a chemical structure of a substituted benzamide derivative reacts with Al_2O_3 to form a similar product. Below the reaction, a table provides detailed data for the reaction:

Field	Value
Product	(3R,4R)-ethyl-4-acetamidobenzamide
Reactant	(3R,4R)-ethyl-4-acet-
Conditions	acetic anhydride
Equivalents	0
Theoretical Mass	172 g
Actual Mass	165 g
Theoretical Moles	899 mmol
Actual Moles	899 mmol
Purity	98.5 %
Yield	95.3 %
Inventory Items	Inventory

Below the table, there is a section for 'Preparation' with a text area containing detailed experimental procedures, including the use of acetic anhydride and acetic acid.



The screenshot shows a text-based protocol for cell adhesion. The text reads: "General cell adhesion protocol v2: Coat a flat bottom plate (Corning-Costar 96-Well, High Binding surface, #2592) with ligand. Generally 100µL x 10µg/mL concentration will work but the proper coated concentration may need to be determined experimentally. Dilute ligand in PBS. Plates should then be sealed and placed at 4°C overnight. After the overnight incubation, wash the plate 1x with PBS, 200µL per well. Add 200µL of PBS/10%NSA to each well. Allow to block for at least one hour. At this point plates can be revealed and returned to the refrigerator to be used at a later point if necessary."

Below the protocol, there is a section for 'Notes' with a text area containing detailed information about cell adhesion proteins, including cadherins and catenins, and their roles in cell-cell adhesion.

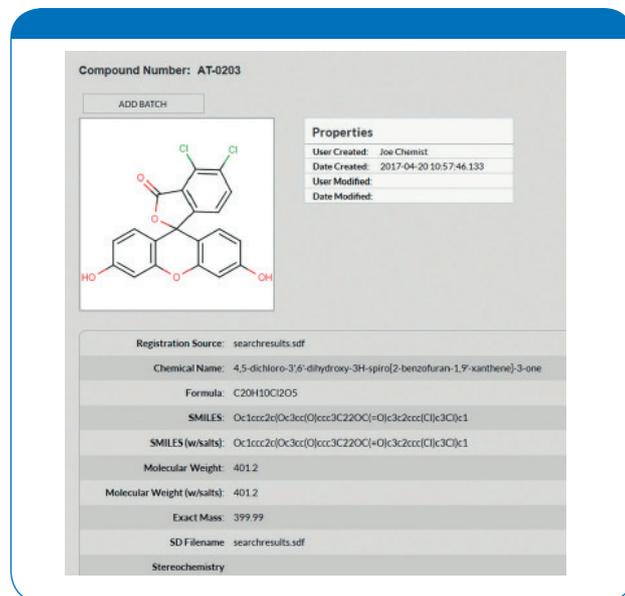


Arxspan Registration

The Arxspan Registration modules are a web-based solution built to serve as an authoritative repository for unique chemical and biological entities. The system handles cases of uniqueness (identity) criteria, mixtures, and cross-referencing, all within a single system that offers unified search across all entities, including chemically intelligent searching for structures. PerkinElmer ChemDraw® is integrated for chemical drawing, and ChemAxon chemical intelligence functionality enables chemical search, property calculations, and full support for salts, mixtures, formulations, tautomers, and isomers.

Key Features

- User customizable fields and unlimited object types
- User definable uniqueness criteria
- Customizable entity and batch numbering



Compound Number: AT-0203

ADD BATCH

Properties

User Created:	Joe Chemist
Date Created:	2017-04-20 10:57:46.133
User Modified:	
Date Modified:	

Registration Source: searchresults.sdf

Chemical Name: 4,5-dichloro-3,6-dihydroxy-3H-spiro[2-benzofuran-1,7-xantheno]-3-one

Formula: C20H10Cl2O5

SMILES: Oc1ccc2c(O)c3cc(O)ccc3C2OC(=O)c3c2ccc(Cl)c3C)c1

SMILES (w/salts): Oc1ccc2c(O)c3cc(O)ccc3C2OC(=O)c3c2ccc(Cl)c3C)c1

Molecular Weight: 401.2

Molecular Weight (w/salts): 401.2

Exact Mass: 399.99

SD Filename: searchresults.sdf

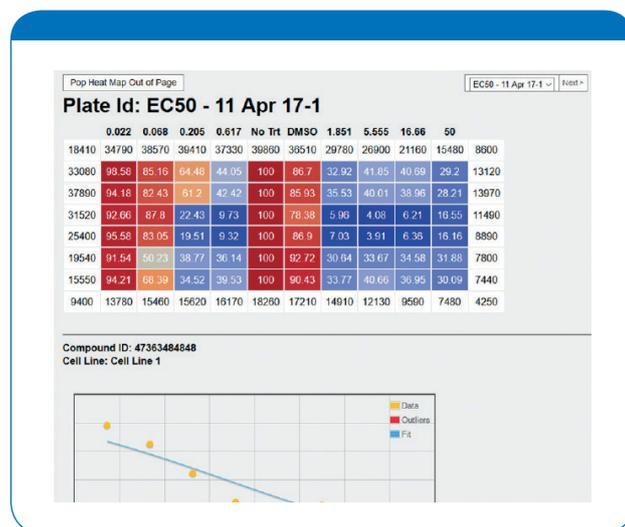
Stereochemistry

Arxspan Assay

Arxspan Assay is a web-based software tool set that can define, collect, manage, and store assay endpoint data—ideal for assay development functions as well as LTS and HTS screening programs. It provides study coordinators an integrated view of study activity and centrally manages data across multiple research groups and facilities. Users can specify required and optional parameters, data types, allowed ranges, and more. Arxspan Assay can perform automated calculation of raw data values, generate curves and heat maps, and allow for point knockouts for curves.

Key Features

- Intuitive user-defined assay definitions, plate formats, and upload templates
- Compatible with user-preferred data analysis tools such as XLfit® or GraphPad Prism
- Secure endpoint data repository and search platform



Pop Heat Map Out of Page

EC50 - 11 Apr 17-1

Plate Id: EC50 - 11 Apr 17-1

	0.022	0.068	0.205	0.617	No Trt	DMSO	1.851	5.555	16.66	50	
18410	34790	38570	36410	37330	39860	36510	29780	26900	21160	15480	8900
33080	90.56	85.16	64.48	44.05	100	86.7	32.92	41.65	40.69	29.2	13120
37880	84.18	82.43	61.2	42.42	100	85.03	35.53	40.01	38.96	28.21	13070
31520	82.06	87.8	22.43	9.73	100	78.38	5.96	4.08	6.21	19.55	11460
25400	95.56	83.05	19.51	9.32	100	86.9	7.03	3.61	6.36	16.16	8860
19540	91.54	50.23	38.77	36.14	100	82.72	30.64	33.67	34.58	31.88	7800
15550	94.21	68.39	34.52	39.53	100	90.43	33.77	40.66	36.95	30.09	7440
9400	13780	15460	15620	16170	18280	17210	14910	12130	9560	7480	4250

Compound ID: 47363484848
Cell Line: Cell Line 1

Legend: Data (yellow dot), Outliers (red square), Fit (blue line)

Arxspan Inventory



Arxspan Inventory is a web-based application for defining and managing inventory items such as proprietary compounds, commercial reagents, samples, consumables, equipment, or animals. Common operations include tracking of receiving, container history, usage levels by user, container location, material check-in/ check-out, plate management, and audit trail. User-defined location hierarchy displays exact locations of stored materials within a building, laboratory, bench-top, freezer, etc. Users can configure container type and storage locations and search by any field, or by chemical structure.

Key Features

- Support for bar code scanners/ readers and printers
- Audit trail for tracking materials from receipt to disposal
- CAS number lookups for chemical structures

Bulk Operations

Search

- Inventory
 - Clinical Lab
 - Reagent Room
 - Bulk Reagent Storage
 - Preparation Storage
 - Ab18
 - Ab201
 - Ab600
 - CD11
 - CD11a**
 - CD11a
 - CD11a
 - CD11b
 - CD11c
 - CD11d
 - Testing Folder
 - Checked Out
 - Disposed

Preparation

Antibody Name*
CD11a

Instrumentation

Equipment*
Leica Bond 3

Prep Kit Serial Number*
LEI8732-02

Container Ide
LEI8732-02

Calculations

Final Volume (uL)*
100

Ig Working Concentration (ug/mL)
1.8

Diluent Volume (uL)
99.1

Antibio
0.9

Expiration Date*
9/8/2017

Registration ID
AB-000009-02 [Show Related Fields](#)

Prepared Date
05/08/2017

Barcode*
2340586156

Location
[Inventory](#)
[Reagent Room](#)
[Preparation Storage](#)

Arxspan Search



Arxspan Search is a decision support tool enabling querying, visualizing, and reporting of data from the Arxspan Notebook, Registration, Assay, and Inventory modules. It allows users to perform realtime searching and sorting of compound, material, assay, and inventory data, and to customize the layout of these results. Users can save search/filter parameters, perform basic mathematical calculations, visualize chemical structures, create customizable graphs, generate 2D plotting, perform structure-activity relationship analyses, export tables to Microsoft Excel, and more.

Key Features

- Integration across all Arxspan datasets and external data repositories
- Visualization of structured and unstructured data of any type
- Streamlined searching, managing, and reporting of information

Hide Duplicate Rows

Showing 1 to 6 of 6 entries

Expand Table Show Empty Rows 0 Rows Download as Excel File Go Show 100 entries

Cell Line	Compound ID	Hill Slope	EC50 (nM)	IC50 Curve	Result Set Name	Result Set ID
Cell Line 1	473634848	-0.32	0.483		EC50 - 11 Apr 17	26431
Cell Line 2	473634848	-0.31	0.289		EC50 - 11 Apr 17	26431
Cell Line 3	473634848	-11.78	1.55		EC50 - 11 Apr 17	26431
Cell Line 4	473634848	-11.27	1.57		EC50 - 11 Apr 17	26431
Cell Line 5	473634848	-0.26	1.10		EC50 - 11 Apr 17	26431

	Notebook	Reg	Assay	Inventory	Search
	Electronic Laboratory Notebook	Materials Registration	Assay Data Management	Inventory Management	Search and Decision Support
Cloud-Based Deployment	✓	✓	✓	✓	✓
Browser Interface	✓	✓	✓	✓	✓
No Additional Software Required	✓	✓	✓	✓	✓
Enterprise Capability	✓	✓	✓	✓	✓
Biology and Chemistry Compatible	✓	✓	✓	✓	✓
Project & Work Request Management	✓	✓	✓	✓	✓
Configurable Hierarchies and Templates	✓	✓	✓	✓	✓
Real-Time Queries	✓	✓	✓	✓	✓
Chemical Search	✓	✓	✓	✓	✓
Text Search	✓	✓	✓	✓	✓
Customizable Forms/Views	✓	✓	✓	✓	✓
In-Vivo Assays Workflows	✓	✓	✓	✓	✓
Bulk Import	✓	✓	✓	✓	
Bar Code Scanning Support	✓	✓	✓	✓	
Attach Files of All Types	✓	✓	✓	✓	
Import/Export SD Files	✓	✓		✓	✓
ChemDraw® Integration	✓	✓		✓	✓
CAS Number Lookups	✓	✓		✓	
21 CFR 11 Compliant	✓			✓	
GLP Qualified Software	✓			✓	
Audit Trails	✓			✓	
Autotext	✓			✓	
Synthesis Mapping	✓			✓	
Chinese/Japanese Localization	✓				
Drag and Drop File Attaching	✓				
Live Editing of Attached Files	✓				
CRAIS Checker	✓				
Electronic Signatures and Witnessing	✓				
SAFE BioParhma Compatible	✓				
Autosave	✓				
Combinatorial Chemistry	✓				
Sketching/Annotating of Images	✓				
Defined Vocabulary List	✓	✓	✓	✓	
Import MS Excel CSV Files		✓	✓	✓	
Salt Stripping		✓		✓	
Registrar Workflow		✓			
Duplicate Recognition		✓			✓
Export MS Excel CSV Files			✓	✓	✓
HTS/LTS Workflow			✓	✓	
Plate Templates			✓	✓	
Plate Views			✓	✓	
Multiple Inventory Capability				✓	✓
Check In/Check Out Tracking				✓	

● Streamline Your Collaborative Research Workflow with the Arxspan Suite of Products



Get Started from Scratch, or Migrate Existing Data to our Cloud Platform

Choose the cloud-based Arxspan system and begin using the software in one business day; or work with our consulting team to integrate our suite of components into your existing workflows and tool set. The Arxspan suite offers a simple, intuitive user interface coupled with granular, robust administrative controls for deployment, configuration, and system access. Our cloud-based product approach facilitates rapid deployment across an enterprise, with no software to install on client machines. Any device with a web browser can access the Arxspan product line.

Connect, Collaborate, Create: Share Research Data Seamlessly

The Arxspan cloud-based suite of applications is a fully integrated platform for distributed collaborative research across internal staff as well as external partners. The Arxspan suite offers 21 CFR Part 11 compliance with full access control and history, version control, electronic signatures and witnessing workflows, and storage of all details in perpetuity. Hosting applications in our secure multi-tenant cloud environment allows users to access the system from around the world and from any computing device, maximizing collaboration and productivity.

