



# Complete Your R&D Transformation with Intelligent Sample Traceability



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Advances in biotechnology are transforming almost every aspect of our lives — from the medicines we use to treat disease, to the sustainable foods, fuels, and materials we use everyday. The scientific techniques and R&D operations needed to bring these innovations to market are constantly evolving and growing in complexity, which means the scale and speed at which R&D data are generated are growing exponentially.

To make these innovations a reality, life science organizations need to digitally transform R&D to empower better-engineered processes, greater predictability, and greater scalability. The first phase of this transformation is the adoption of a digital notebook over paper notebooks. This simplifies note taking, improves data searching and sharing, and helps protect intellectual property, but it's only part of what's needed to truly address the challenges of modern R&D.

The next phase of R&D transformation requires a modern, unified solution that can interlink and track the entire R&D process, from molecular design, to experimental tracking, to data acquisition and process management. This solution must comprise tools for capturing, centralizing, and integrating all types of structured and unstructured data. Benchling's Registry, Inventory, and Insights applications tie together experimental results and sample intelligence, so you can answer any question about your experiments and accelerate the pace of your R&D.

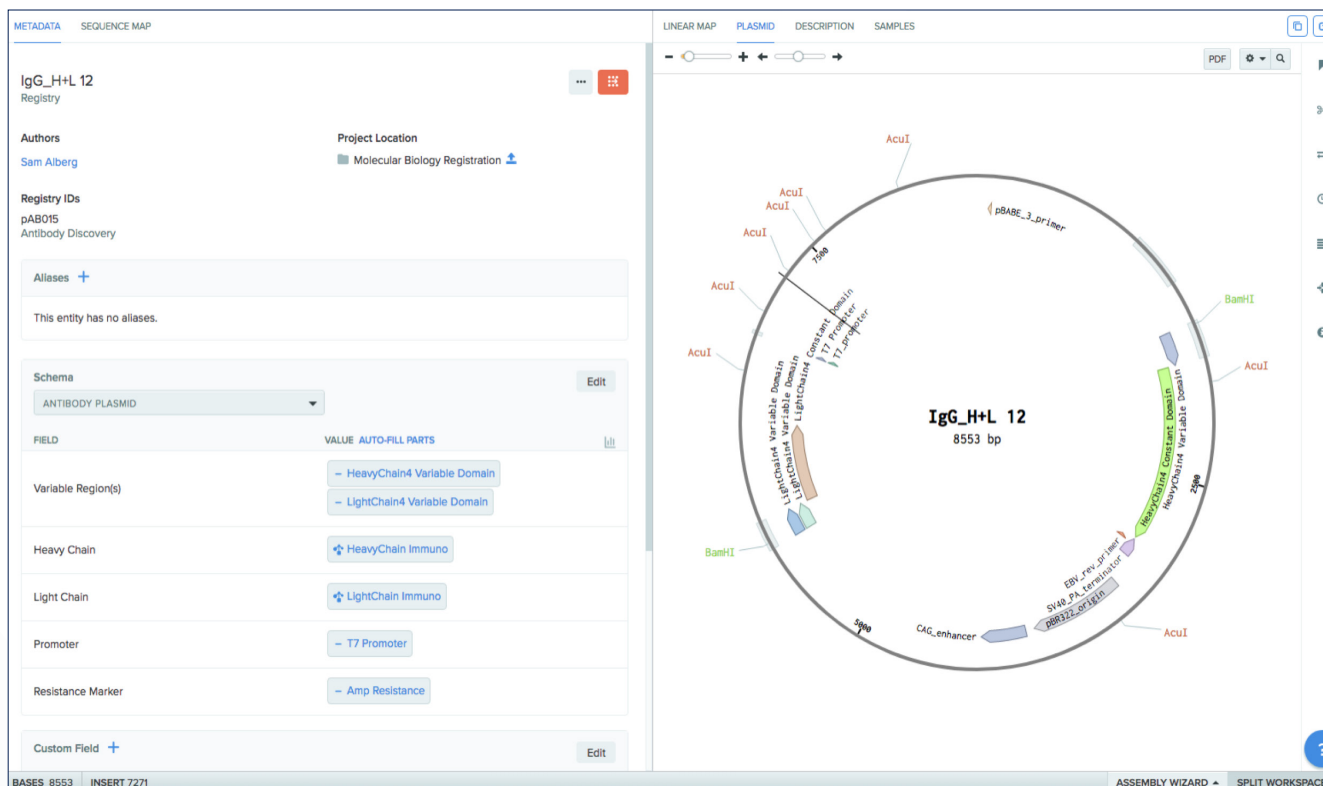


"Benchling Registry is like a human brain. It provides evolvable organization, relational capabilities, and instant communication. As a result, all our antibodies are codified, registered, and linked to relevant information that can be easily shared across groups. All of this is essential for scale-up and has fostered our R&D growth."

**Dima Gharaibeh**, Project Manager, Sorrento Therapeutics



# Registry: Model anything with end-to-end traceability



## Flexible Modeling

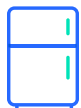
Model simple to complex molecules — such as mAbs, ADCs, bispecifics, and viruses — as your organization grows.

## Trace Lineages

Map relationships between entities from end-to-end. For example, link from sequences, to plasmids, to cell lines, to final products.

## Capture Structured Data

Record structured results and metadata on in-process and final molecules.



# Inventory: A digital window into your physical lab

Barcode 10x10-BOX057  
Location Ashoka Fridge

|   | 1  | 2  | 3  | 4  | 5  | 6  | 7  | 8  | 9  | 10  |
|---|----|----|----|----|----|----|----|----|----|-----|
| A | 1  | 2  | 3  | 4  | 5  | 6  | 7  | 8  | 9  | 10  |
| B | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20  |
| C | 21 | 22 | 23 | 24 | 25 | 26 | 27 | 28 | 29 | 30  |
| D | 31 | 32 | 33 | 34 | 35 | 36 | 37 | 38 | 39 | 40  |
| E | 41 | 42 | 43 | 44 | 45 | 46 | 47 | 48 | 49 | 50  |
| F | 51 | 52 | 53 | 54 | 55 | 56 | 57 | 58 | 59 | 60  |
| G | 61 | 62 | 63 | 64 | 65 | 66 | 67 | 68 | 69 | 70  |
| H | 71 | 72 | 73 | 74 | 75 | 76 | 77 | 78 | 79 | 80  |
| I | 81 | 82 | 83 | 84 | 85 | 86 | 87 | 88 | 89 | 90  |
| J | 91 | 92 | 93 | 94 | 95 | 96 | 97 | 98 | 99 | 100 |

| <input type="checkbox"/> Position | Container | Volume        | Sample     |
|-----------------------------------|-----------|---------------|------------|
| 1 A1                              | V113652   | 90 mL         | SMP089-001 |
| 3 A3                              | V113654   | Not specified | SMP091-001 |
| 4 A4                              | V113655   | Not specified | SMP092-001 |
| 5 A5                              | V113656   | Not specified | SMP093-001 |
| 6 A6                              | V113657   | Not specified | SMP094-001 |
| 7 A7                              | V113658   | Not specified | SMP095-001 |
| 8 A8                              | V113659   | Not specified | SMP096-001 |
| 9 A9                              | V113660   | Not specified | SMP097-001 |
| 10 A10                            | V113661   | Not specified | SMP098-001 |
| 11 B1                             | V113662   | Not specified | SMP099-001 |
| 12 B2                             | V113663   | Not specified | SMP100-001 |
| 13 B3                             | V113664   | Not specified | SMP101-001 |
| 14 B4                             | V113665   | Not specified | SMP102-001 |

## Interlink Sample Information

Link physical batches to experimental context and results.

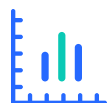
## Intact Chain of Custody

Integrate with barcode scanners and freezers to keep samples up-to-date.

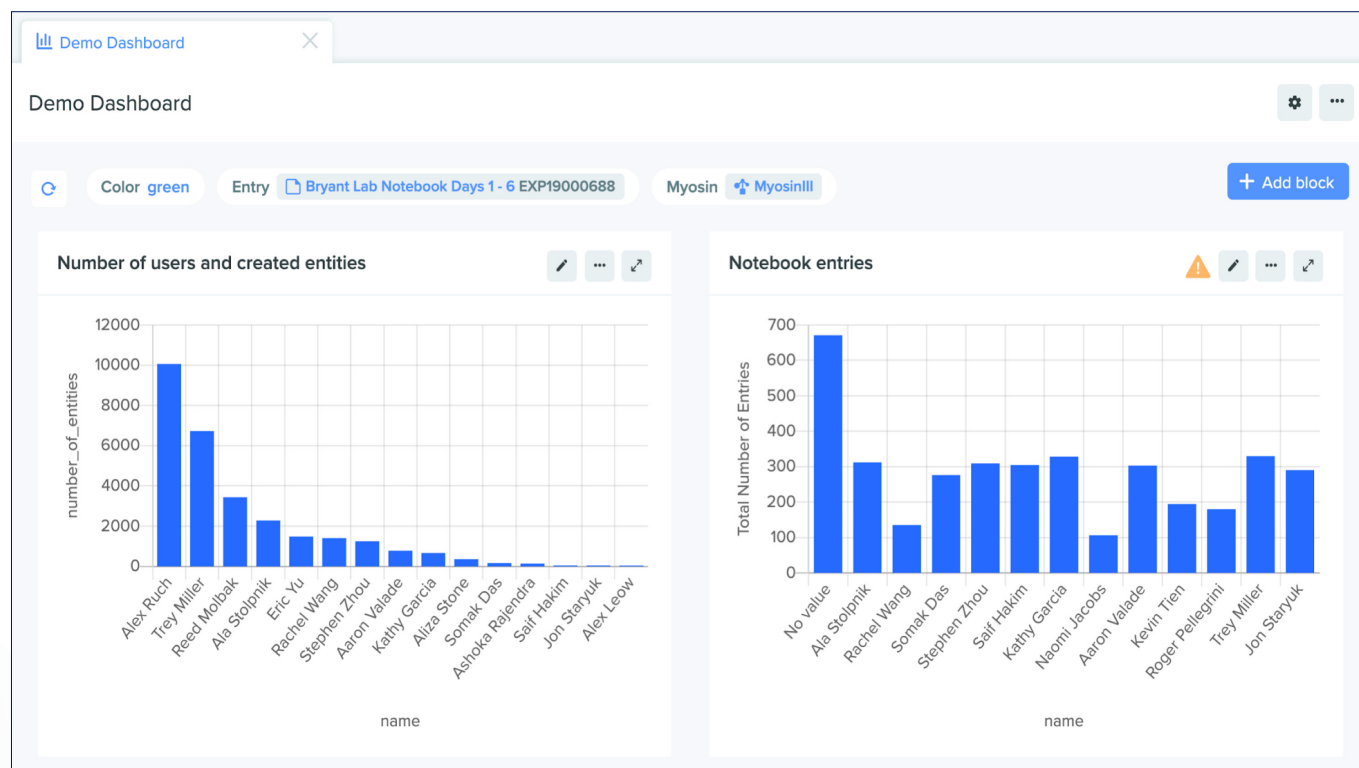
## Streamline Communication

Submit assay requests for samples, linked directly to all related information.





# Insights: Intelligence to power your R&D



## Generate Scientific Insights

Build reports to understand and compare results within, or across, experiments.

## Unlock Operational Insights

Dive deeper into resource allocations and usage to enhance team productivity and optimize workflows.

## Drive Collaboration

Share individual queries, dashboards, and analyses within teams or with leadership.



# How intelligent sample traceability can transform your R&D



## Standardize and centralize all R&D data

Benchling unifies and standardizes data across each step of the process, creating a single source of truth that is searchable and queryable.



## Increase scientist productivity

Eliminate manual tasks like transcribing data in multiple places, manipulating Excel files, and sending multiple emails for information handoff.



## Improve data integrity

Benchling's standardization in entity naming and processes reduces redundancies and minimizes the chance of human error, promoting data integrity.



## Unlock insights from your data

With data centralized on Benchling, you can access insights across experiments and programs to make data-driven decisions.

If you'd like to learn more about how Benchling **Registry**, **Inventory**, and **Insights** can take your R&D transformation to the next level, contact your Benchling representative or **request a demo**.