

Q1 2022: What's new in Selector (Reagents and model systems)

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We are excited to announce new enhancements to the platform between January - March 2022.

This quarter, we added data from over **5,500,000 experiments** and **1,800,000 products** across our reagent and model system types. In addition, we added preprint data from **bioRxiv** as a new data source, **amino acid coordinates** for protein products, new specifications for **ELISA kits**, and more! Learn about these new features below!

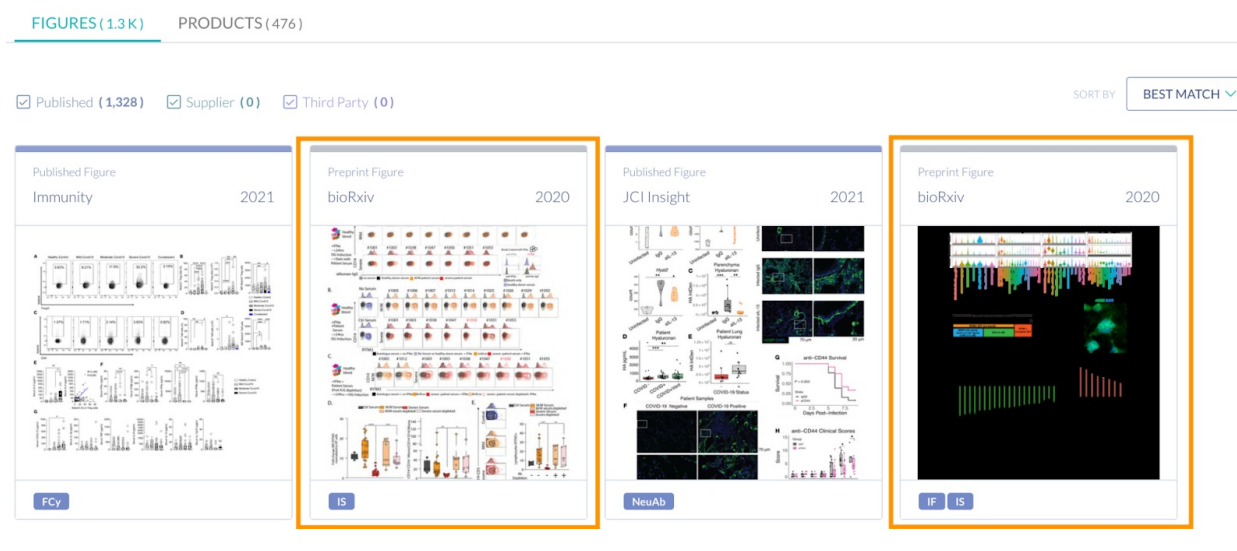
Please note that access to these features and enhancements will depend on which reagents and model systems are available at your organization.

1. Preprint data is now on the platform

BenchSci has partnered with **bioRxiv** to provide you with visibility on the latest developments in biomedical research. This new data source will help you:

- Stay up-to-date on recent research being explored against your target
- See which products have been used most recently
- Avoid waiting months to years for an article to be published in a peer-reviewed journal

Click [here](#) to learn more about viewing preprint data.



2. Protein amino acid coordinates

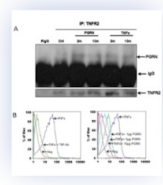
You can now easily identify the protein fragments being sold by vendors by reviewing amino acid coordinates for protein products. Our internal team of bioinformaticians has mapped vendor-provided protein sequences to

determine amino acid coordinates across over 1 million protein products. This will help you select protein products with greater confidence, ensuring proteins contain key functional groups before purchasing. Click [here to learn more](#).

Protein - Cytokines/Growth Factors, Recombinant

Recombinant Human TNF-alpha Protein

R&D Systems | 210-TA-100



1599 Figures

CellTx
ActA
CCult

Inhb
CoStd
CFunc

PsCt
Print

ELISAStd

+ See More

Species: Human

Escherichia Coli (E. Coli) (Expression System)

Bioactive

Unconjugated

Amino Acid Coordinates:
Val77-Leu233

Save to List
Add To Compare

3. Predicted PCR binding location for in-house generated products

Predicted binding location data for in-house generated PCR primers and probes is now available. BenchSci has leveraged its strong bioinformatics pipeline to infer predicted binding location data for 33% of in-house generated PCR primers and probes. This improvement will enable you to select custom primers with greater confidence, as previously, we only had this binding location data for vendor products. Click [here to learn more](#).

Sequence Info

SEQUENCE SPECS ^

Target	GAPDH
Product Sequence	5'-TCCACCACCCTGTTGCTGTA-3'
Predicted Binding Location	Exon 1 (ENSSSCT00000045248.2)

4. Find animal models with custom genetic modifications

BenchSci has developed novel technology to detect **genetic modifications** in animal models within the literature, adding data from an initial 16,000 figures! Avoid going down the path of generating your own model that may already exist. You can now search by gene name to find the most appropriate animal model for your research across commercially available models with genetic modifications of interest and custom models produced by labs in-house post-purchase. Click [here to learn more](#).

Strain

Mutant Strain

Disease Model

Phenotype

Research Area

Gene Expression

Model Type

Drug

Breeding

State

Haplotype

Q NLRP3

Selected Filters:

Gene Expression Vendor: NLRP3 (Knockout)

Gene Expression

Published Figures Supplier Figures

NLRP3	All	Pub	Supp
All NLRP3	130	0	0
<input checked="" type="radio"/> Knockout	127	0	0
<input type="radio"/> Targeted Mutation	9	0	0

PRODUCTS AND EXPERIMENTS

Matching Your Search (1) Animal Models (1)

Your Search: Product Type: Animal Model, Animal Model Species: Mouse, Animal Model Gene Expressions: Nlrp3

Animal Model - Mouse Animg KO/KD

C57BL/6 model was used in this figure

No Catalog # was cited

NLRP3 (Knockout) modification detected in the figure

[See All C57BL/6 Mouse Models >](#)

5. Links to cell line gene expression databases

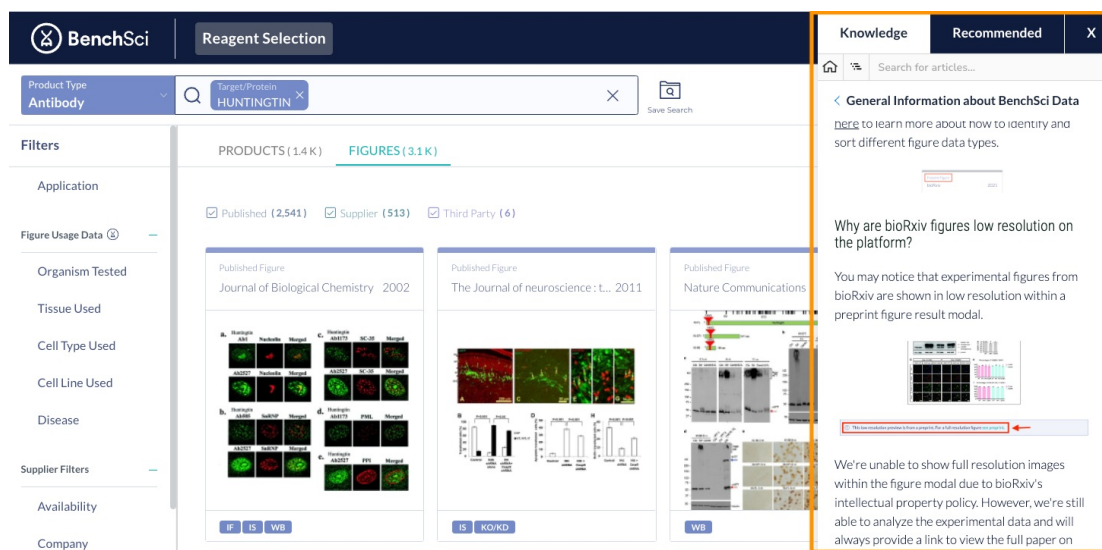
When searching for cell lines, you can now review gene expression data from three third-party data sources: *ImmGen*, the *Human Protein Atlas*, and the *Human Cancer Model Initiative*. A link to these databases is listed on product pages, where available, to provide additional product details, including gene profiles, increasing confidence when selecting cell lines for your experimental context. Click [here to learn more about finding gene expression data for cell products](#) or check out [our blog post](#).

6. New specifications for ELISA kits

Based on user feedback, we have added new product specifications for **ELISA kits**, including *Sensitivity*, *Assay Format*, *Detection*, *Inter-assay Precision*, and *Intra-assay Precision*, where available. Based on these ELISA kit specifications, you will now be able to make more informed selections based on requirements for your experimental context. Click [here to learn more about these new specs](#).

7. Knowledge Center help widget

The **Knowledge Center** is home to over 200 articles that provide helpful how-to guides, strategies for searching our database, and answers to FAQs about our features and data.



The screenshot displays the BenchSci Reagent Selection interface. The top navigation bar includes the BenchSci logo and a 'Reagent Selection' tab. Below this, a search bar shows 'Antibody' as the product type and 'HUNTINGTIN' as the target/protein. A search button with a magnifying glass icon is visible. On the left, a 'Filters' sidebar lists various criteria such as Application, Figure Usage Data, Organism Tested, Tissue Used, Cell Type Used, Cell Line Used, Disease, Supplier Filters, Availability, and Company. The main content area shows search results for 'HUNTINGTIN', with 'PRODUCTS (1.4 K)' and 'FIGURES (3.1 K)' tabs. Three 'Published Figure' cards are displayed, each with a thumbnail image and a title. A 'Knowledge Center' widget is overlaid on the right side of the interface, featuring a search bar and a list of articles. The first article is titled 'General Information about BenchSci Data' and includes a link to learn more about how to identify and sort different figure data types. Other articles include 'Why are bioRxiv figures low resolution on the platform?' and 'We're unable to show full resolution images within the figure modal due to bioRxiv's intellectual property policy. However, we're still able to analyze the experimental data and will always provide a link to view the full paper on...'. The widget also includes a 'Recommended' section and a close button (X).

The *Support* button in the top right corner of the app opens a widget to quickly and easily access help content from our **Knowledge Center** while you are searching, all in the same window. Click [here to learn more about utilizing the in-app widget](#).

Please note that access to these features and enhancements will depend on which reagents and model systems are available at your organization. If you have access to antibody data only, [check out our **Antibody update**](#).