Q3 2022: What's new in Selector (Reagents and model systems)

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> **We are excited to announce new enhancements on the platform between July and September 2022**

Over the past three months, we've added data from over **5.4 million experiments** and **6.1 million products** across our reagent and model system types. Other notable updates include:

- Easily **Share search** results with colleagues built with filters and search terms in the search bar

- View calculated off-target binding data for select **RNAi** and **CRISPR guide RNA** products

- Improvements to the breadth of our data with **Mary Ann Liebert** journals as a new data source

1. Share searches that you have curated on Selector with collaborators, lab mates, and more!

After applying filters to your search to narrow down *product* and *figure results,* you may want to share your search with colleagues or collaborators. Click the new **Share Search** button to copy a link, or simply copy the URL from your browser's address bar. This makes it easier to share all of the results you have with your search terms. When the page is refreshed or someone opens the platform with that URL, the search is recreated and all of the filters will be applied in the search bar.

Learn more about <u>sharing searches</u>!
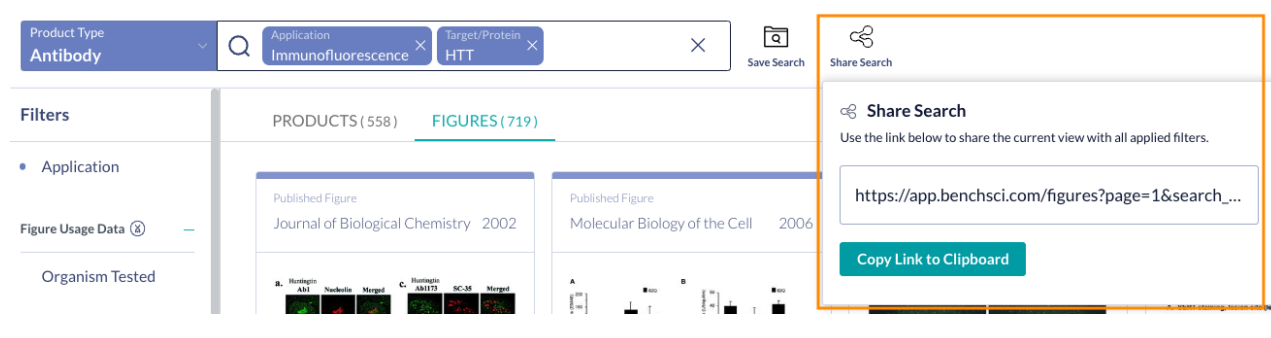
2. View off-target binding data for RNAi and CRISPR guide RNA products

We've recently added off-target data and features! Leverage this data as you search for **RNAi** and **CRISPR gRNA** reagents to optimize your experiments. For products with off-target data available, view the *target sequence*, *target species*, sequence matching analysis (**RNAi** products), and in-house-generated *off-target* and *on-target* scores (**CRISPR gRNA** products). Use this information to help predict how likely the reagent will bind to the *target sequence* or result in potential off-target activity in your experiment. Easily compare products from different

sources directly on the platform without having to consult multiple websites or bioinformatics tools.

OFF-TARGET DETAILS ∧

Sequence Matches	#MM ⓘ	Gene	Locus	Accession #
Number of mismatches when compared to the target sequence.				
GCCTGCTGAGGAGCTCTCCAT	0	ATG7	chr<3>:<forward><2428>	ENSG00000197548
GCCTGCTGAGGAGCTCTCCAT	0	ATG7	chr<3>:<forward><1932>	ENSG00000197548
GCCTGCTGAGGAGCTCTCCAT	0	ATG7	chr<3>:<forward><2091>	ENSG00000197548
GCCTGCTGAGGTGCTCTGCAG	3	POLR3E	chr<16>:<forward><1174>	ENSG00000058600
GACTGCTGAGGAGCTCACCCT	3	ARAP1	chr<11>:<reverse><1359>	ENSG00000186635
GACTGCTGAGGAGCTCACCCT	3	ARAP1	chr<11>:<reverse><4255>	ENSG00000186635
GCCTGCTGAGAAACTCTTCAT	3	ITGB6	chr<2>:<reverse><1022>	ENSG00000115221

Mismatches (annotation pointing to GCCTGCTGAGGTGCTCTGCAG)

Learn more about <u>finding this data</u> and <u>how access to this data can help with your research</u>!

3. Mary Ann Liebert journals as an additional data source

We've analyzed over 38,000 articles from over 100 **Mary Ann Liebert** journals to provide scientists with additional insights regarding appropriate reagents and model systems for your experiments. We will continue to add more data from **Mary Ann Liebert** as new papers are published to keep scientists up-to-date with the latest research.

Learn more in our <u>blog post</u>!

4. Improved searchability of publication-derived data for PCR, CRISPR guide RNAs, and RNAi products based on <u>species</u>

We've improved our technology to help you find more relevant data for sequence-based products such as **PCR** primers, **RNAi** products, or **CRISPR** guide RNAs (gRNA). You can now use the **Species** (*PCR*), **Reactivity** (*RNAi*), and **Target Species** (*gRNA*) filters to specify criteria from both vendor-provided product specifications AND details detected from publications.

Having better visibility into sequence data from publications, such as the sequence of an in-house PCR primer or an optimized RNAi target sequence in a particular experiment, can be helpful as you design or troubleshoot your own experiments.

5. More data for CRISPR Cas Nuclease and guide RNA products

We've recently enhanced our detection of **CRISPR reagent usage** in the literature. Search through **4x more CRISPR data** on the **Reagent Selection application** to help with your next experiment! CRISPR continues to be an important tool for advancing scientific research, and improved detection of CRISPR reagent usage in the literature will continue to support new features on in our platform, such as off-target data for gRNA products, to help you find the most relevant products and publication data for your experiments.

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