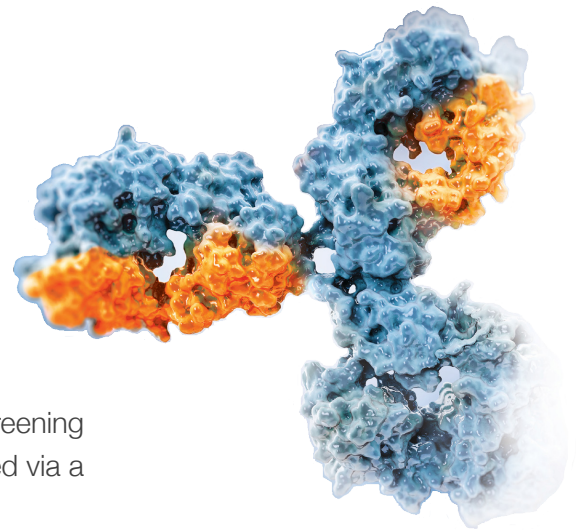


# Therapeutic Antibody Discovery



Geneious Biologics is an enterprise cloud software solution for screening antibodies and antibody-like constructs. All functionality is delivered via a modern, easy to use web interface.

An advanced application programming interface (API) enables Geneious Biologics to integrate with your organization's established data systems. An advanced filtering and query language allows scientists to quickly and accurately identify best performing antibodies, regardless of where data resides within your organization's infrastructure.

## Enhance your workflow with Geneious Biologics

Clones	Sequences
1 of 115 selected	
<input checked="" type="checkbox"/>	YH_31023_A_H 5 VH 31023 B4 CORRECT
<input type="checkbox"/>	YH_31023_A_H2 8 VK 31023 H2 CORRECT
<input type="checkbox"/>	YH_31023_B_ 28 VK 31023 H2 CORRECT
<input type="checkbox"/>	YH_31023_B_ 18 VK 31023 H2 CORRECT
<input type="checkbox"/>	YH_31023_B_ 10 VK 31023 H2 CORRECT
<input type="checkbox"/>	YH_31023_B_ 37 VK 31023 H2 VALIDATION E... FR2 out of frame
<input type="checkbox"/>	YH_31023_B_ 16 VK 31023 H2 CORRECT
<input type="checkbox"/>	YH_31023_B_ 21 VK 31023 H2 CORRECT
<input type="checkbox"/>	YH_31023_B_ 20 VK 31023 H2 CORRECT
<input type="checkbox"/>	YH_31023_B_H 5 VH 31023 B4 CORRECT
<input type="checkbox"/>	YH_31023_B_ 17 VK 31023 H2 CORRECT
<input type="checkbox"/>	YH_31023_B_H2 9 VK 31023 H2 CORRECT

SEQUENCE VIEW STATISTICS NOTES

300 400 500 600 700 800 900 1000

BLAST hit 1: ...

Add Assay Data

Append Columns from "Public dataset Example metadata - 2 import.csv" to "public 11 second copy" clones table

Match rows using: Clone id (public 11 second copy table) and cloneid (Public dataset Example metadata - 2 import.csv)

Clone id	Match	Experimentid	cloneid	Weight	EC50-secondRun
23	?				
24	?				
25	?				
3	✓	31023	3	35.078	0.3
4	✓	31023	4	35.078	0.4
5	✓	31023	5	35.078	0.5
6	✓	31023	6	35.078	0.6
60	?				
61	?				
7	✓	31023	7	35.078	0.7
8	✓	31023	8	35.078	0.8
9	?				

✓ 8 / 27 rows from "public 11 second copy" matched  
 ? 15 unmatched rows from "public 11 second copy" will not be modified  
 ✗ 0 unmatched rows from "Public dataset Example metadata - 2 import.csv" will be disregarded

CANCEL ADD ASSAY DATA



## Run sequence analysis

Extract detailed, precise antibody sequence information. Automatically detect sequence errors to improve the accuracy of your experiments.

- Visualise results - sequences table + clones table
- Analyze human, mouse, rat, rabbit germlines
- Annotate frameworks, CDRs, conserved AAs
- Define constant domains and other user regions
- Pair VH/VL sequence
- Cluster and run statistical analysis on defined regions



## Screen and investigate results

Compare your analysis results against your library of different experiment sequence and assay information. Pinpoint the best antibody candidates.

- View tabular and sequence data
- Add assay data
- Filter to show best performing antibodies

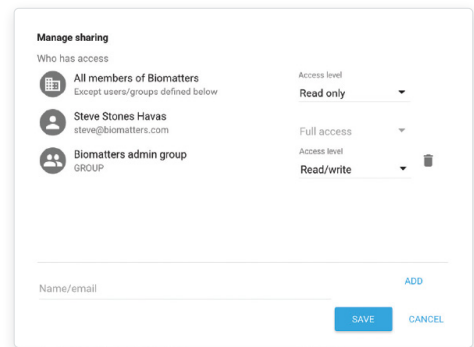
Geneious Biologics boasts an annotation pipeline that supports mAbs, scFv, VHH and can be easily configured to support other types of antibodies and non-antibody scaffolds. The ability to add functional assay data makes the selection of high affinity binding antibodies easier than ever.



## Upload and manage experiment data

Share data and experiment summaries while managing users and group access in a highly secure environment. Create workspaces, folders and experiment navigation.

- Assign permissions for data sharing and collaboration across your entire organization
- Deploy powerful search tools
- Create primer sets
- Customize and configure antibody reference databases (BLAST)
- Import data from a wide variety of sources and associate it with your sequence data to identify best performing molecules



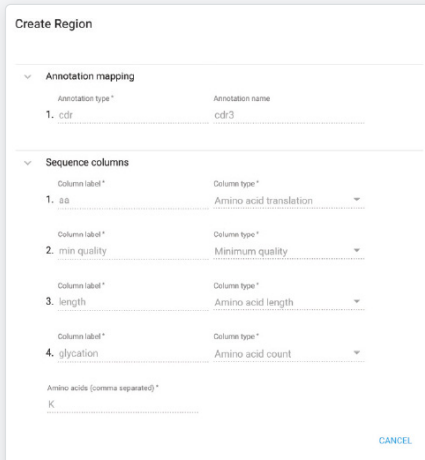
Geneious Biologics incorporates a powerful new web-based sequence viewer and integrates seamlessly with other Geneious software solutions while supporting well known third-party data formats such as Genbank and Excel for direct upload and download of data.



## Configure experiments

Configure experiments to suit your individual needs and workflows. Define and extract information from the part of the antibody sequence you are interested in.

- Upload and merge experimental and assay data from external sources such as Excel
- Customize reference database for BLAST and other search tools
- Automatically identify and flag bad sequencing reads and out of frame regions
- Add your own notes to describe sequence and clone data



- Configure your experiment for:
  - mAb
  - ScFv
  - Synthetic constructs
  - Non-antibody scaffolds
- Validate for expected annotations
- Customize analysis reports



## Download to Geneious and Excel

Integrate Geneious Biologics with external systems for the easy and safe export of antibody sequence data to be used in the next stage of your workflow.

- Download files and tables to Excel
- Access experiment data in the cloud directly, using Geneious

