

How to Read BLAST® Report



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Although the appearance of the experimental BLAST® results page is new, it actually contains the same data that is in the previous BLAST® results page. The presentation was streamlined to be more readable and options and features which were previously hidden have been brought to the surface.

The screenshot shows the BLAST results page with the following details:

- Job Title:** P01013:RecName: Full=Ovalbumin-related protein very f ...
- RID:** 9TRM6SYX015 (Search expires on 03-29 22:47 pm, Download All)
- Program:** BLASTP 2.8.1+ (Citation)
- Database:** nr (See details)
- Query ID:** P01013.1
- Description:** RecName: Full=Ovalbumin-related protein X; AltName: Full=Gene X protein
- Molecule type:** amino acid

Filter Results section includes:

- Organism:** only top 20 will appear (exclude checkbox)
- Percent Identity:** [] to []
- E value:** [] to []
- Buttons: Filter, Reset



The upper left corner of the results still contain basic information on the search including the RID, BLAST® version, and the database searched, as well as info about the query when available.

You can use the filtering options to filter the results by

- organism
- percent identity
- expect value

These filters only apply to the results of the search & do not re-run the search.

The report is divided in Descriptions, Graphic Summary, Alignment and Taxonomy tabs. You can select only the sequences you are interested in and your selection is retained between all tabs.

The screenshot shows the 'Sequences producing significant alignments' table with the following columns: Description, Max Score, Total Score, Query Cover, E value, Per. Ident, and Accession. Three sequences are selected:

Description	Max Score	Total Score	Query Cover	E value	Per. Ident	Accession
RecName: Full=Ovalbumin-related protein X; AltName: Full=Gene X protein	481	481	100%	9e-172	100.00%	P01013.1
ovalbumin-related protein X [Gallus gallus]	477	477	100%	6e-168	98.71%	NP_001263315.1
ovalbumin-related protein X isoform X3 [Gallus gallus]	477	477	100%	1e-167	98.71%	XP_015137661.1
ovalbumin-related protein X isoform X2 [Gallus gallus]	476	476	100%	2e-167	98.71%	XP_015137660.1
ovalbumin-related protein X isoform X1 [Gallus gallus]	478	478	100%	4e-167	98.71%	XP_015137659.1
hypothetical protein CIB84_014810 [Bambusicola thoracicus]	442	442	100%	3e-155	91.81%	POI21443.1
PREDICTED: ovalbumin-related protein X (Melospiza gallopavo)	441	441	100%	9e-153	90.95%	XP_019469333.1
hypothetical protein H355_008079 [Colinus virginianus]	426	426	100%	1e-147	86.21%	OXB84603.1

This feature allows you to *clean up* your results and not lose this organization in other views.

The screenshot shows the 'Graphic Summary' view with the following features:

- Alignment Scores:** Legend for scores: < 40, 40 - 50, 50 - 80, 80 - 200, >= 200.
- Conserved Domains:** A bar chart showing domains like 'reactive center loop' and 'SERPIM superfamily'.
- Distribution of the top 3 Blast Hits on 3 subject sequences:** A bar chart showing the alignment of the top 3 hits across 3 subject sequences.