

Site Search

Note: this exercise uses PlasmoDB.org as an example database, but the same functionality is available on all VEuPathDB resources.

Learning objectives:

- Search by keywords or identifiers
- Filter site search results by categories and fields
- Export results to a search strategy
- Find a specific gene using its ID in site search
- Navigate to and from the site search result
- Explore searches using wild cards (*)

The site search is located in the header of any VEuPathDB site and is available on every page. The site search queries the databases for your term or ID and returns a list of pages and documents that contain your query term.

1. **Search for a keyword.** Enter the word *kinase* in the site search window. Then click enter on your keyboard or click on the search icon.



Site Search result format: The site search returns a categorized list of pages and documents that contain your term. Site search results are summarized on the left with a details panel on the right. Changing the panel on the left will populate the details panel with that result. What is the total number of results with the word kinase? Are all the results genes?

All results matching **kinase**

1 - 20 of 20,497

Export as a Search Strategy to download or mine your results

Filter results

Genome

Genes

Population biology

Popset isolate sequences

Metabolism

Metabolic pathways

Compounds

Data access

Data sets

Searches

19,596

352

352

193

1

3

Filter fields

Select a result filter above

Filter organisms

select all | clear all | expand all | collapse all

Type a taxonomic name

☐ Reference only

☐ Haemoproteidae

☐ Plasmodiidae

331

19,266

Gene - PCYB_132500 kinase

Gene type: protein coding gene

Organism: Plasmodium cynomolgi strain B

Fields matched: GO terms; InterPro domains; Orthologs; Product description; Product descriptions (all)

Gene - PKNOH_S07456300 Kinase

Gene type: protein coding gene

Organism: Plasmodium knowlesi strain Malaysian Strain Pk1 A

Fields matched: GO terms; InterPro domains; Orthologs; Product description; Product descriptions (all)

Gene - PKNOH_S140234600 Kinase

Gene name or symbol: IPK2

Gene type: protein coding gene

Organism: Plasmodium knowlesi strain Malaysian Strain Pk1 A

Fields matched: EC descriptions and numbers; GO terms; InterPro domains; Orthologs; PDB chains; Product description; Product descriptions (all)

Gene - AK88_00505 pantothenate kinase

Gene type: protein coding gene

Organism: Plasmodium fragile strain nilgiri

Fields matched: EC descriptions and numbers; GO terms; InterPro domains; Orthologs; PDB chains; Product description; Product descriptions (all)

Gene - AK88_01656 phosphoglycerate kinase

Gene type: protein coding gene

Organism: Plasmodium fragile strain nilgiri

Fields matched: EC descriptions and numbers; GO terms; InterPro domains; Orthologs; PDB chains; Product description; Product descriptions (all)

Results are summarized by category.

Details panel with information about each item returned.

2. **Filter the site search result by category:** How many genes included the word kinase in their product descriptions?

Filter the results so that you can only view gene results, and the Filter Fields section expands to reveal additional filtering options. Select the *Product descriptions* field and choose *Apply*. Once a filter is applied, it can be removed by clicking on *Clear filter* (right panel below).

The image shows three sequential screenshots of a web interface for filtering search results. Each panel has a 'Filter results' header with a 'Hide zero counts' checkbox and a 'Clear filter' button. Below this is a 'Filter Gene fields' section with a list of categories and their counts. The 'Genome' section shows 'Genes' selected. The 'Filter organisms' section has a search bar and a list of organisms.

Category	Count
EC descriptions and numbers	11,643
GO terms	8,874
InterPro domains	10,652
Notes from annotators	1
Orthologs	11,026
PDB chains	6,901
Product description	7,630
Product descriptions (all)	7,633
PubMed	682
Rodent malaria phenotype	119
User comments	256

Organism counts:

Organism	Count
Haemoproteidae	331
Plasmodiidae	19,265

3. **Filter the site search result by organism:** How many of the above genes are found in *Plasmodium falciparum* 3D7? Explore the *Filter organisms* section of the results filter and use the search filter to navigate the tree.

The image shows two sequential screenshots of the web interface. The first panel shows the 'Filter organisms' section with a search bar containing '3d7'. The second panel shows the same section with 'Plasmodium falciparum 3D7 [Ref]' selected and the 'Apply' button highlighted.

Organism	Count
Plasmodiidae	7,527
Plasmodium	7,395
Plasmodium falciparum	2,792
Plasmodium falciparum 3D7 [Ref]	137

4. **Export the results to a search strategy.** Use the blue *Export as a search strategy* button at the top right-hand side of the results. Once exported, you can take advantage of over 100 specialized searches using the Add Step button. We will learn more about this in a future exercise.

Genes matching **kinase** (filtered by fields and organisms)

1 - 20 of 137

Filter results ☒ Hide zero counts [Clear filter](#) 137

Gene - PF3D7_0616000 pyridoxal kinase
 Gene name or symbol: PDXX
 Gene type: protein coding gene
 Organism: Plasmodium falciparum 3D7
 Fields matched: EC descriptions and numbers; GO terms; InterPro domains; Orthologs; PDB chains; Product description; Product descriptions (all); PubMed

Export as a Search Strategy to download or mine your results

My Search Strategies

[Opened \(1\)](#) [All \(261\)](#) [Public \(45\)](#) [Help](#)

Unnamed Search Strategy *

Text 137 Genes Step 1 [Add a step](#)

137 Genes (113 ortholog groups) [Revise this search](#)

Gene Results **Genome View** **Analyze Results**

Genes: 137 Transcripts: 138 ☐ Show Only One Transcript Per Gene ☐ Show only the Genes in my basket

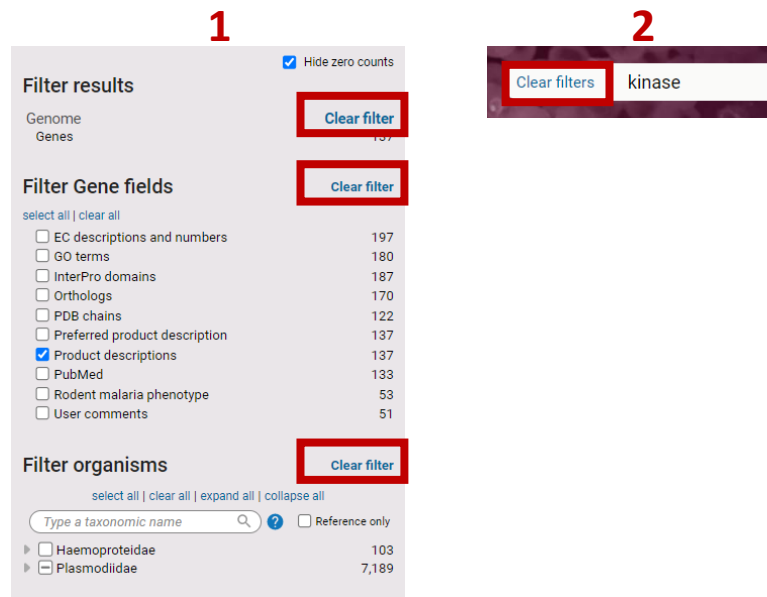
Rows per page: 50 [Download](#) [Send to...](#) [Add Columns](#)

Gene ID	Transcript ID	Organism	Interpro Description
PF3D7_0102600	PF3D7_0102600.1	Plasmodium falciparum 3D7	Protein kinase domain;Tyrosine-protein kinase, active site;Protein kinase-like dom
PF3D7_0103700	PF3D7_0103700.1	Plasmodium falciparum 3D7	N/A

5. Return to the site search results page. You can achieve this in two ways: 1. Your previous results and filter settings were preserved and can be accessed by clicking on the 'back to results' arrow in the site search window. 2. Click on your browser's back arrow.



6. **Clear all filters.** You can achieve this in two ways: 1. click on each clear filter option in the filter results panel. 2. You can click on the *clear filters option* in the site search window to Clear All filters.



7. Click the *Hide zero counts* check box in the *Filter results* panel. What does this do?

