

## Searches Now Return Transcripts - Explore Transcripts in Your Search Result.

Transcript subsets occur when a multi-transcript gene has at least one transcript that does not meet the search criteria. For example, the Predicted Signal Peptide search returns genes and transcripts with predicted signal peptides. If one transcript of a multi-transcript gene excludes the exon containing the signal peptide, the search returns the gene but not the signal peptide-deficient transcript. The explore tool offers a filter for returning transcripts that did not meet the search criteria (B). When combining two search results where both searches query transcript specific data, the explore tool offers further filters for viewing transcripts that were returned by both searches, either search or neither search (E).

- PlasmoDB 3-step strategy that returns Signal Peptide and Transmembrane domain containing genes that are likely translated based on polysomal transcriptomics data.
- The Explore Transcript Tool: Click the box of the subset you want to view and then Apply Selection. The search strategy will be filtered, and the result table populated, with your chosen result.
- The Gene Result tab contains a column of Transcript IDs.
- The same 3-step strategy focused on the second step result. (Click Step 2's Venn diagram to populate the table with those results.)
- The Explore Tool with options to view transcript subsets.
- View of Transcripts that did not meet the search criteria. Filters are applied to search strategy and transcript subsets are shown in the table.

**My Strategies:** New Opened (2) All (32) Basket Public Strategies (9) Help

**A**

Signal Pep 1079 Genes  
Step 1

Transmb Dom 7731 Genes  
Step 2

PF3D7 Polysoma 4930 Genes  
Step 3

Add Step

1079 Genes from Step 1  
Strategy: SP/TM/Caro

Click on a number in this table to limit/filter your results

Gene Results Genome View Analyze Results

Some Genes in your result have Transcripts that did not meet the search criteria. Collapse

**B**

Include Transcripts that:

- ☒ did meet the search criteria 1092 transcripts
- ☐ did not meet the search criteria 6 transcripts

Apply selection

Genes: 1079 Transcripts: 1092 Show Only One Transcript Per Gene

First 1 2 3 4 5 Next Last Advanced Paging Download Add

Gene ID	Transcript ID	Organism	Genomic Location (Gene)	Product Description
PF3D7_0100500	PF3D7_0100500.1	P. falciparum 3D7	PF3D7_01_v3.53.169.53.280(-)	erythrocyte membrane protein 1 (PIEMP1), exon 1, pseudogene
PF3D7_0100600	PF3D7_0100600.1	P. falciparum 3D7	PF3D7_01_v3.53.778.55.006(-)	nfin
PF3D7_0101000	PF3D7_0101000.1	P. falciparum 3D7	PF3D7_01_v3.65.817.66.909(-)	nfin

**Strategies:** New Opened (1) All (15) Basket Public Strategies (39) Help

**D**

Signal Pep 1079 Genes  
Step 1

Transmb Dom 7731 Genes  
Step 2

PF3D7 Polysoma 4930 Genes  
Step 3

Add Step

719 Genes from Step 2  
Strategy: Signal Pep

Click on a number in this table to limit/filter your results

Gene Results Genome View Analyze Results

Some Genes in your combined result have Transcripts that were not returned by one or both of the two input searches. Collapse

**E**

Include Transcripts returned by:

- ☒ both searches 726 transcripts
- ☐ just your previous search 2 transcripts
- ☐ just your latest search 2 transcripts
- ☐ neither search 3 transcripts

Apply selection

Genes: 719 Transcripts: 726 Show Only One Transcript Per Gene

First 1 2 3 4 5 Next Last Advanced Paging Download Add

Gene ID	Transcript ID	Genomic Location (Gene)	Product Description	Transcripts	Transcript Returned by Previous Search
PF3D7_0100500	PF3D7_0100500.1	PF3D7_01_v3.53.169.53.280(-)	erythrocyte membrane protein 1 (PIEMP1), exon 1, pseudogene	1	Y
PF3D7_0100600	PF3D7_0100600.1	PF3D7_01_v3.53.778.55.006(-)	nfin	1	Y
PF3D7_0100900	PF3D7_0100900.1	PF3D7_01_v3.62.187.63.400(-)	nfin	1	Y
PF3D7_0101000	PF3D7_0101000.1	PF3D7_01_v3.65.817.66.909(-)	nfin	1	Y

**F**

Signal Pep 1079 Genes  
Step 1

Transmb Dom 7731 Genes  
Step 2

PF3D7 Polysoma 4930 Genes  
Step 3

Add Step

7 Genes from Step 2  
Strategy: Signal Pep

Click on a number in this table to limit/filter your results

Gene Results Genome View Analyze Results

Some Genes in your combined result have Transcripts that were not returned by one or both of the two input searches. Collapse

Include Transcripts returned by:

- ☐ both searches 726 transcripts
- ☒ just your previous search 2 transcripts
- ☒ just your latest search 2 transcripts
- ☒ neither search 3 transcripts

Advanced Paging Download Add

Gene ID	Transcript ID	Genomic Location (Gene)	Product Description	Transcripts	Transcript Returned by Previous Search
PF3D7_0206000	PF3D7_0206000.2	PF3D7_02_v3.275.540.276.577(-)	merozoite surface protein 5	2	N
PF3D7_0313700	PF3D7_0313700.1	PF3D7_03_v3.555.035.558.684(-)	conserved Plasmodium protein, unknown function, unspecified product	2	Y