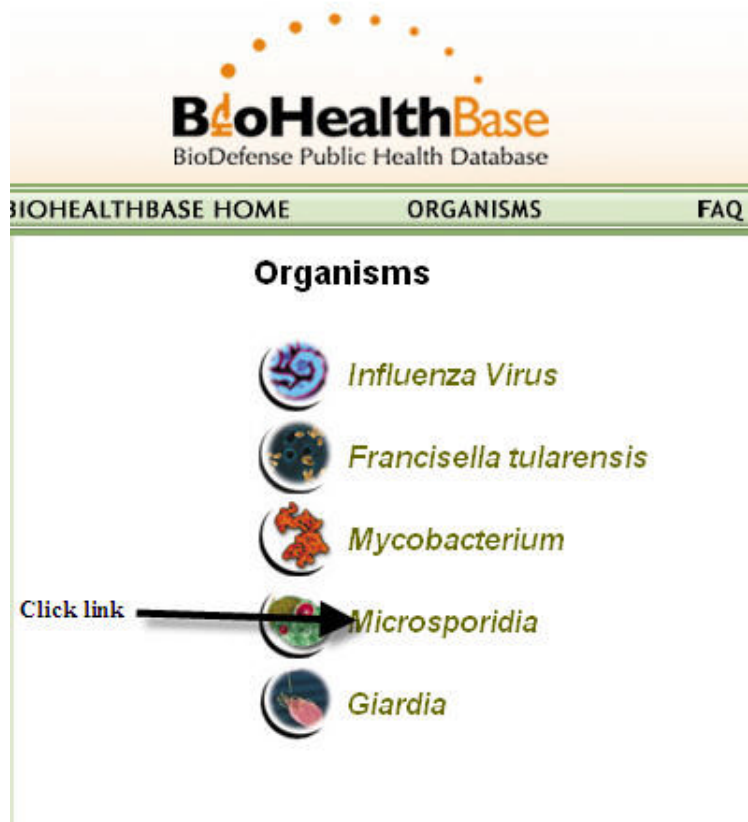
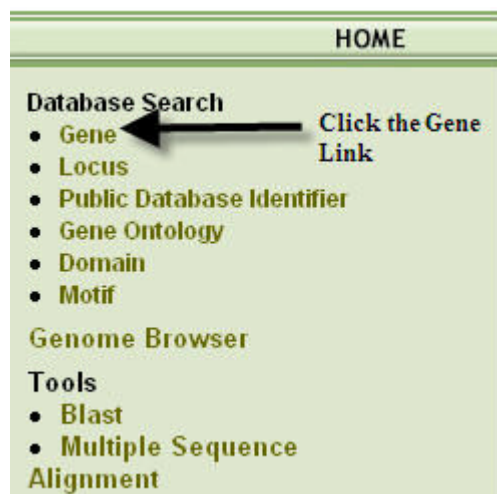


# Microsporidia Gene Search

To get to the Microsporidia home page click the Microsporidia link in the organism section of the home page.



Click on the Gene link in the left toolbar to go to the Gene Search Page.



## Gene Search Options:


Organism (e.g. *Encephalitozoon cuniculi* GB-M1) - *pre-selected*

Gene Product Name (e.g. kinase)

Gene Search

Text search of genes in BioHealthBase. Leave the term field blank to search for all genes. ?

Specify Organism:

Gene Product Name   Enter search term in text field  
Example: pyruvate kinase

Genomic location (optional)

Select Chromosome(s): 

I  
II  
III  
IV  
IX  
V  
VI  
VII  
VIII  
X  
XI  
All

\* Can select multiple chromosomes

Specify Strand:

Specify Start:  Specify End:

Genomic Location - *optional*

Chromosome (e.g. VI)

Strand (e.g. Forward)

Start (e.g. 900000)

End (e.g. 920000)

### Genomic location (optional)

Select Chromosome(s):

I
II
III
IV
IX
V
VI
VII
VIII
X
XI
All

Select Chromosome - Optional  
Select multiple chromosomes using ctrl/click or shift/click

\* Can select multiple chromosomes

Specify Strand: Both

Click on the drop down menu to Specify Strand (e.g.,

Specify Start:

Specify End:

Specify Start and End in the text boxes

GO CLEAR

Click GO

### Hints:

- Multiple chromosomes can be selected by utilizing the Ctrl/Click or Shift/Click functionality
- If no genomic location is selected, the default is all chromosomes and all locations
- Complete gene product name **is not** required for the Gene Product Name search (e.g. kinase will return all gene product names which contain the word "kinase")

# Gene Search Results


This screen displays specific information for one or more genes which matched the search criteria. The user has the following options:

Click the Gene Product Name to display the Gene Details screen

**Gene Search Results**

Click on the Gene Product Name to display the Gene Details

You can sort the results by ascending or descending order by clicking on the up and down arrows next to the column name

New Search  Add To GeneCart Genes in Cart 0/0


1 | 2 | 3 | 4 | 5 | >> GFF3 Download

All <input type="checkbox"/>	Gene Product Name <input type="text"/>	Entrez ID <input type="text"/>	Locus Name <input type="text"/>	Genbank Genomic Accession <input type="text"/>	UniProtKB Accession <input type="text"/>	Chromosome <input type="text"/>	Organism <input type="text"/>	GBrowse
<input type="checkbox"/>	hypothetical protein	859238	ECU06_0580	NC_003233	Q8SVC6	VI	Encephalitozoon cuniculi GB-M1	<a href="#">View GBrowse</a>
<input type="checkbox"/>	hypothetical protein	859239	ECU06_0590	NC_003233	Q8SVC5	VI	Encephalitozoon cuniculi GB-M1	<a href="#">View GBrowse</a>
<input type="checkbox"/>	DNA-DIRECTED RNA POLYMERASE II THIRD CHAIN	859240	ECU06_0600	NC_003233	Q8SRR5	VI	Encephalitozoon cuniculi GB-M1	<a href="#">View GBrowse</a>

Click the View GBrowse to display the Genome Browser

**Gene Search Results**

Click on the view GBrowse link to display the Genome Browser

New Search  Add To GeneCart Genes in Cart 0/0

1 | 2 | 3 | 4 | 5 | >> GFF3 Download

All <input type="checkbox"/>	Gene Product Name <input type="text"/>	Entrez ID <input type="text"/>	Locus Name <input type="text"/>	Genbank Genomic Accession <input type="text"/>	UniProtKB Accession <input type="text"/>	Chromosome <input type="text"/>	Organism <input type="text"/>	GBrowse
<input type="checkbox"/>	hypothetical protein	859238	ECU06_0580	NC_003233	Q8SVC6	VI	Encephalitozoon cuniculi GB-M1	<a href="#">View GBrowse</a>
<input type="checkbox"/>	hypothetical protein	859239	ECU06_0590	NC_003233	Q8SVC5	VI	Encephalitozoon cuniculi GB-M1	<a href="#">View GBrowse</a>
<input type="checkbox"/>	DNA-DIRECTED RNA POLYMERASE II THIRD CHAIN	859240	ECU06_0600	NC_003233	Q8SRR5	VI	Encephalitozoon cuniculi GB-M1	<a href="#">View GBrowse</a>

## How To Download/Save Gene Information

- Check the box which corresponds to the desired gene(s) - Check All to select all items displayed on the screen

New Search Add To GeneCart Genes in Cart 0/0 Check the box of the required Gene GFF3 Download

All	Gene Symbol	Gene Product Name	Pathway	Entrez ID	Locus Name	Genbank Genomic Accession	UniProtKB Accession	Organism	GBrowse
<input checked="" type="checkbox"/>	dnaX	DNA polymerase III, gamma tau subunits	-N/A-	4199359	FTF0190c	NC_008245	Q14JP4	Francisella tularensis FSC 198	<a href="#">View GBrowse</a>
<input type="checkbox"/>	dnaN	DNA polymerase III, beta chain	-N/A-	4199357	FTF0002	NC_008245	Q14K60	Francisella tularensis FSC 198	<a href="#">View GBrowse</a>

- Select a download type from the Download list - GFF3, Gene in FASTA, CDS in FASTA, Protein in FASTA or Tab Delimited Text File. More information about these formats is below.
- Click the Download button

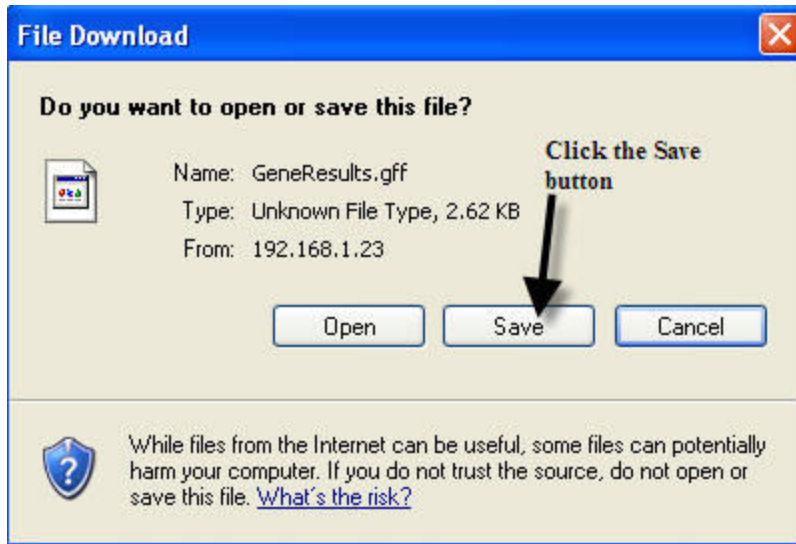
**Gene Search Results**

Your search returned " 30 " record(s)

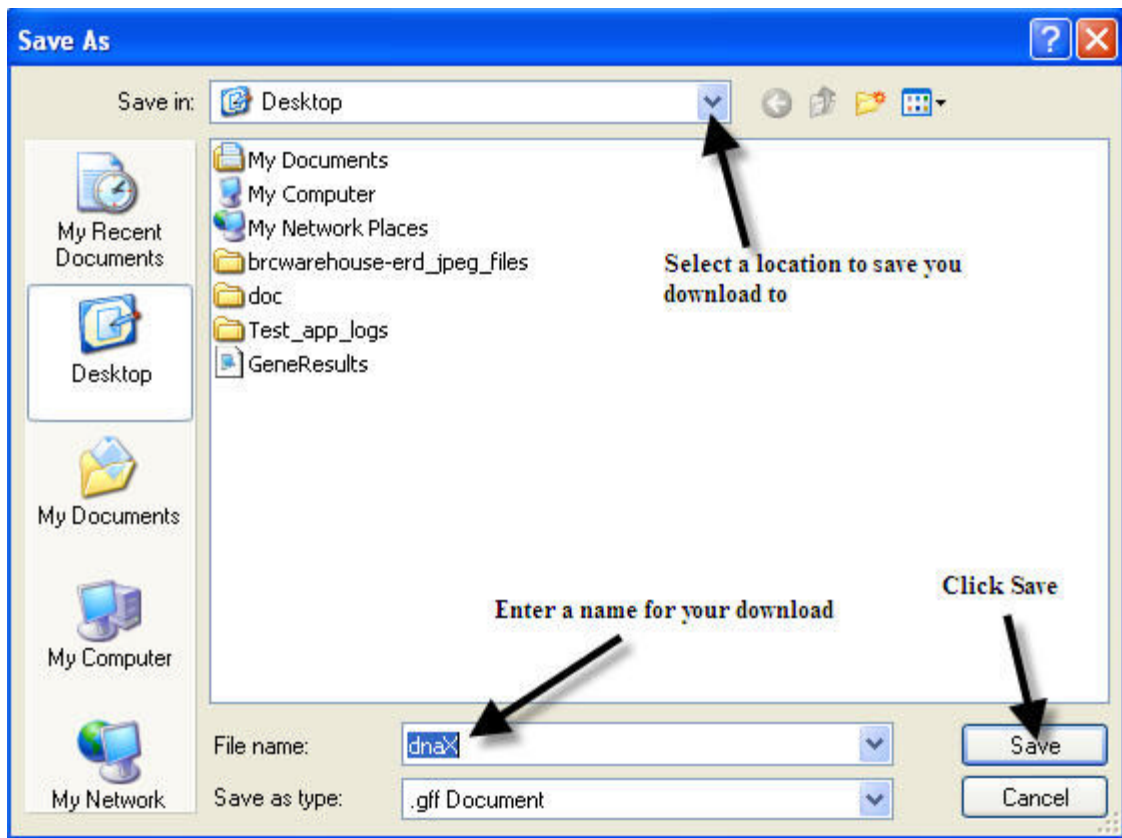
New Search Add To GeneCart Genes in Cart 0/0 Click the drop down menu to select download format GFF3 Click to start the download Download ?

All	Gene Symbol	Gene Product Name	Pathway	Entrez ID	Locus Name	Genbank Genomic Accession	UniProtKB Accession	Organism	GBrowse
<input type="checkbox"/>	dnaX	DNA polymerase III, gamma tau subunits	-N/A-	4199359	FTF0190c	NC_008245	Q14JP4	Francisella tularensis FSC 198	<a href="#">View GBrowse</a>

- Click the Save button on the File Download pop-up message



- Select a location on your hard drive to save the file - give the file a more meaningful name
- Click the Save button on the Save As dialog box



- Download/Save selected gene information in the following formats:



- General Feature Format (GFF3) - A format for describing genes and other features associated with DNA, RNA, and Protein sequences
- Fast All (FASTA) - A format which facilitates the comparison of a nucleotide database or an amino acid sequence against a protein sequence database (see [Blast](#))
- Tab Delimited - A text format that uses the tab character as separators between fields

## How to Add to Gene Cart

- Check the box which corresponds to the desired gene(s) - Check All to select all items displayed on the screen



**Gene Search Results**

Your search returned " 2051 " record(s) ?

New Search Check the box of the required Gene

Genes in Cart 0/0 1 | 2 | 3 | 4 | 5 | >> GFF3 Download

All	Gene Product Name	Entrez ID	Locus Name	Genbank Genomic Accession	UniProtKB Accession	Chromosome	Organism	GBrowse
<input checked="" type="checkbox"/>	hypothetical protein	859238	ECU06_0580	NC_003233	Q8SVC6	VI	Encephalitozoon cuniculi GB-M1	<a href="#">View GBrowse</a>
<input type="checkbox"/>	hypothetical protein	859239	ECU06_0590	NC_003233	Q8SVC5	VI	Encephalitozoon cuniculi GB-M1	<a href="#">View GBrowse</a>

- Click the Add to Gene Cart button



**Gene Search Results**

Your search returned " 2051 " record(s) ?

New Search Click the Add to Gene Cart button

Genes in Cart 0/0 1 | 2 | 3 | 4 | 5 | >> GFF3 Download

All	Gene Product Name	Entrez ID	Locus Name	Genbank Genomic Accession	UniProtKB Accession	Chromosome	Organism	GBrowse
<input checked="" type="checkbox"/>	hypothetical protein	859238	ECU06_0580	NC_003233	Q8SVC6	VI	Encephalitozoon cuniculi GB-M1	<a href="#">View GBrowse</a>
<input type="checkbox"/>	hypothetical protein	859239	ECU06_0590	NC_003233	Q8SVC5	VI	Encephalitozoon cuniculi GB-M1	<a href="#">View GBrowse</a>

- Click the View Gene Cart button to view selections

## Gene Search Results

Click the View GeneCart

Your search returned " 30 " record(s)

[New Search](#)



Genes in Cart 1/0.

GFF3

**Download**

- Click the 'X' to delete a particular line item
- Click the 'X' under All to clear the Gene Cart screen

## Gene Cart

BioHealthBase Gene(s) in cart : 3

External Sequence(s) in cart : 0

Tools	
<b>1. Select BioHealthBase genes to download</b> <b>2. Select the download option</b> <div>GFF3</div> <div><b>Download</b></div> <p><i>Note: Only BioHealthBase genes can be downloaded</i></p>	<b>1. Select BioHealthBase genes and/or external sequences for analysis</b> <b>2. Select the sequence type</b> <div>Amino Acid</div> <b>3. Select the program</b> <div>BLAST</div> <div><b>Analyze</b></div>

Click to delete all items

BioHealthBase genes								
All	Gene Product Name	Start	End	Strand	Chromosome	Organism	GBrowse	All
<input type="checkbox"/>	hypothetical protein	77311	78201	1	VI	Encephalitozoon cuniculi GB-M1	<a href="#">View GBrowse</a>	<input type="checkbox"/>
<input type="checkbox"/>	hypothetical protein	78553	80301	1	VI	Encephalitozoon cuniculi GB-M1	<a href="#">View GBrowse</a>	<input type="checkbox"/>
<input type="checkbox"/>	DNA-DIRECTED RNA POLYMERASE II THIRD CHAIN	80333	81055	-1	VI	Encephalitozoon cuniculi GB-M1	<a href="#">View GBrowse</a>	<input type="checkbox"/>

Click to delete a particular item

### \*Note:

- Bacteria genes will not be visible from within the Influenza screens
- Clicking the All box selects all of the genes, but does not display checks in the corresponding boxes

### Hints:

- Clicking the All box selects all of the genes displayed on the screen, not all of the genes returned from the search
  - Download Functionality is available from the Gene Cart screen also
- It may be necessary to select a program in order to Open (rather than Save) the selected gene information file, in which case any text editor program will wor