

Influenza Sequence Search

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



BioHealthBase
BioDefense Public Health Database

BIOHEALTHBASE HOME ORGANISMS FAQ FEEDBACK

Organisms

Click on link →  [Influenza Virus](#)

 [Francisella tularensis](#)

 [Mycobacterium](#)

 [Microsporidia](#)

 [Giardia](#)

Genomes in BioHealthBase

Species-based

Organism	Kingdom	# Strain
<i>Francisella tularensis</i>	Bacteria	3
<i>Mycobacterium tuberculosis</i>	Bacteria	2
<i>Mycobacterium avium</i>	Bacteria	1
<i>Mycobacterium leprae</i>	Bacteria	1
<i>Mycobacterium bovis</i>	Bacteria	1
<i>Mycobacterium</i>	Bacteria	1
<i>Encephalitozoon cuniculi</i>	Fungi	1
Influenza A Virus	Virus	7221
Influenza B Virus	Virus	1136
Influenza C Virus	Virus	154

Kingdom-based

Kingdom	# Species	# Strain
Bacteria	6	9
Fungi	1	1
Virus	3	8511
Total	10	8521

Publications
BRC News and Events
Mission
Release Notes
Data Loads
Related Links
Science Support

Click on the Sequence search link in the left side of the navigation bar.



Influenza Virus

HOME FAQ HELP FEEDBACK BIOH

Database Search

- Sequence ← [Sequence Search Link](#)
- Epitope
- Public Database Identifier
- Sequence Polymorphism

Genome Browser

- Concatenated Ref

Tools

- Blast
- Multiple Sequence Alignment

Reactome Pathway

- Influenza Infection

Publications

News and Events

What's New

November 21, 2006 - Data Refresh

- Added ~ 3800 *Influenza* sequences from GenBank
- Added NetCTL epitope predictions for ~10,000 *Influenza* sequences
- Added BlastP:Swiss-Prot alignments for new *Influenza* sequences

October 27, 2006 - Data Refresh

- Added sequence and annotation data for ~ 4000 *Influenza* sequences from GenBank
- Updated UniProt data
- Updated curated epitopes derived from The Immune Epitope Database and Analysis Resource (IEDB)

Gene Search Options:

1. Sequence Type
2. Sequence Status
3. Organism (e.g. Influenza A Virus)
4. Host: Viral natural host (e.g. Human)
5. Geographic Location (A list of locations where viruses were isolated - e.g. China)
6. Subtype (e.g. H9N2)
7. Segment (e.g. 5)
8. From Year/To Year (A range of years viruses were isolated - e.g. 1999 through 2005)

Sequence Search

Text search of genes in BioHealthBase. To refine your search, specify as many fields as possible. ?

Sequence Type :

Sequence Status :

Search By Organism:

Host :

Geographic Location:

Subtype :

Segment :
1 PB2
2 PB1
3 PA
4 HA
5 NP
6 NA
7 MP

From Year : eg. 1999

To Year : eg. 2005

Min Gene Length :

To Specify Sequence Type, Sequence Status, Organism and Geographic Location click on the drop down menu

* eg: H1N1 (Leave blank to view genes from all subtypes)

Enter Subtype in the text field

Select Segment from the list provided. Use Ctrl click or Shift click to select multiple segments.

To refine your search populate as many fields as possible.

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 Symbol or Gene Product Name to display the Gene Details screen

Click on the Gene Symbol or Gene Product Name to display the Gene Details

Gene Search Results

Your search returned " 3240 " record(s)

New Search

Add To GeneCart

Genes in Cart 0/0

1 | 2 | 3 | 4 | 5 | >>

GFF3

Download

All	Gene Symbol	Gene Product Name	Genbank Genomic Accession	Complete Genome Set	Complete CDS	Segment	Length	Subtype	Year	Host	Geographic Location	Organism	GBrowse
<input type="checkbox"/>	PA	polymerase acidic protein	AY724254	false	true	3	2151	H7N1	1979	Avian	United Kingdom	Influenza A Virus A/African starling/England-Q/983/1979	View GBrowse
<input type="checkbox"/>	PA	PA polymerase subunit	U71136	false	true	3	2151	H3N2	1994	Human	Japan	Influenza A Virus A/Akita/1/94	View GBrowse

Click the View GBrowse to display the Genome Browser

Gene Search Results

Your search returned " 3240 " record(s)

New Search

Add To GeneCart

Genes in Cart 0/0

1 | 2 | 3 | 4 | 5 | >>

GFF3

Download

Click on the View GBrowse link to display the Genome Browser

All	Gene Symbol	Gene Product Name	Genbank Genomic Accession	Complete Genome Set	Complete CDS	Segment	Length	Subtype	Year	Host	Geographic Location	Organism	GBrowse
<input type="checkbox"/>	PA	polymerase acidic protein	AY724254	false	true	3	2151	H7N1	1979	Avian	United Kingdom	Influenza A Virus A/African starling/England-Q/983/1979	View GBrowse
<input type="checkbox"/>	PA	PA polymerase subunit	U71136	false	true	3	2151	H3N2	1994	Human	Japan	Influenza A Virus A/Akita/1/94	View GBrowse

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

Your search returned " 3240 " record(s) [Check the box of the required Gene](#)

[New Search](#)

 [Add To GeneCart](#)

Genes in Cart 0/0

1 | 2 | 3 | 4 | 5 | >>

All	Gene Symbol	Gene Product Name	Genbank Genomic Accession	Complete Genome Set	Complete CDS	Segment	Length	Subtype	Year	Host
<input type="checkbox"/>	PA	polymerase acidic protein	AY724254	false	true	3	2151	H7N1	1979	Avian
<input checked="" type="checkbox"/>	PA	PA polymerase subunit	U71136	false	true	3	2151	H3N2	1994	Human

- 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

 [View GeneCart](#)

Gene Search Results

Click the drop down menu to select download format

Click to start the download

?

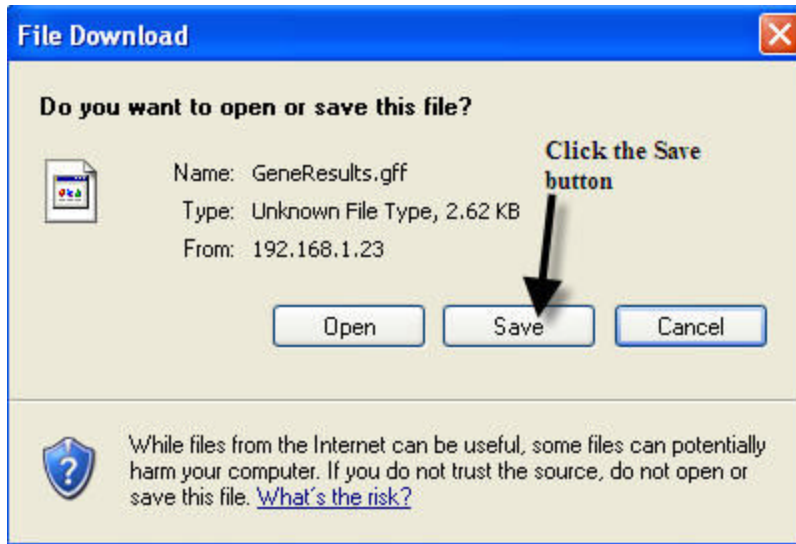
1 | 2 | 3 | 4 | 5 | >>

GFF3

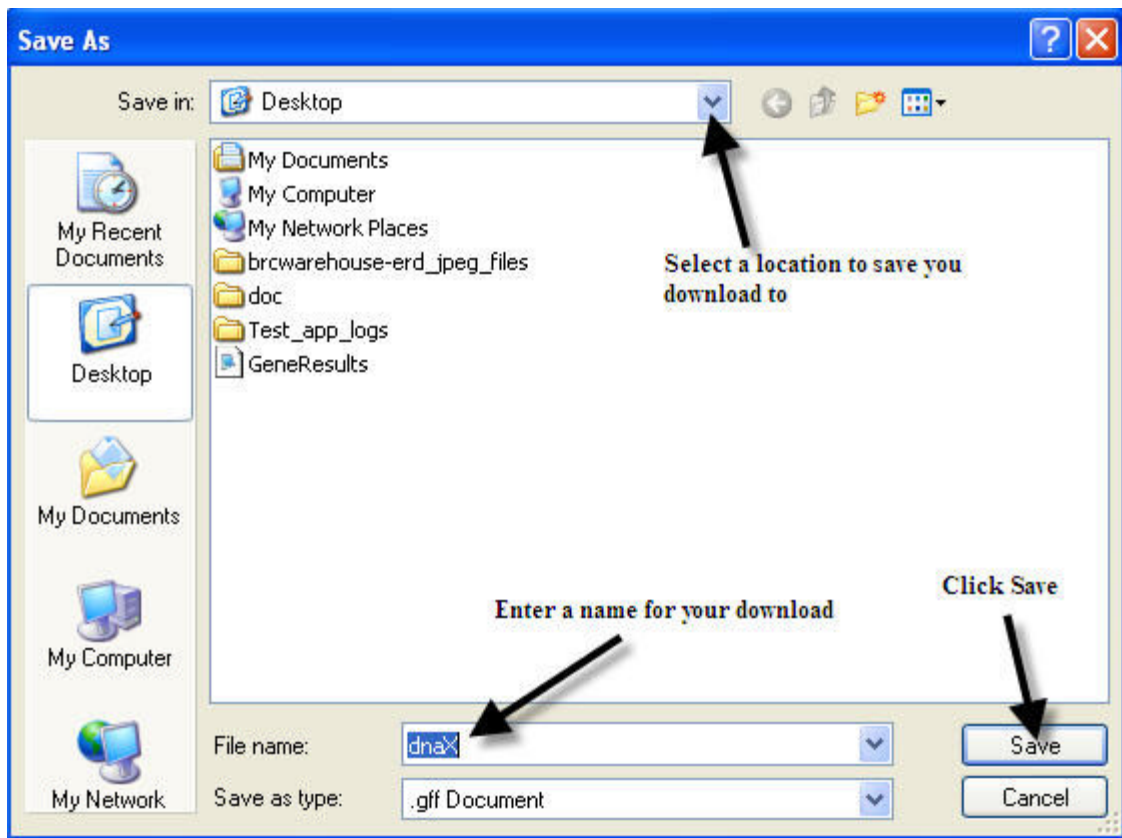
Download

Complete CDS	Segment	Length	Subtype	Year	Host	Geographic Location	Organism	GBrowse
true	3	2151	H7N1	1979	Avian	United Kingdom	Influenza A Virus A/African starling/England-Q/983/1979	View GBrowse
true	3	2151	H3N2	1994	Human	Japan	Influenza A Virus A/Akita/1/94	View GBrowse

- 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

Your search returned " 3240 " record(s) [Check the box of the required Gene](#)

[New Search](#)

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

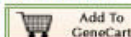
All	Gene Symbol	Gene Product Name	Genbank Genomic Accession	Complete Genome Set	Complete CDS	Segment	Length	Subtype	Year	Host
<input type="checkbox"/>	PA	polymerase acidic protein	AY724254	false	true	3	2151	H7N1	1979	Avian
<input checked="" type="checkbox"/>	PA	PA polymerase subunit	U71136	false	true	3	2151	H3N2	1994	Human

- Click the Add to Gene Cart button

Gene Search Results

Your search returned " 3240 " record(s) [Click the Add to GeneCart](#)

[New Search](#)

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

All	Gene Symbol	Gene Product Name	Genbank Genomic Accession	Complete Genome Set	Complete CDS	Segment	Length	Subtype	Year
<input type="checkbox"/>	PA	polymerase acidic protein	AY724254	false	true	3	2151	H7N1	1979
<input checked="" type="checkbox"/>	PA	PA polymerase subunit	U71136	false	true	3	2151	H3N2	1994

- 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		
<p>1. Select BioHealthBase genes to download</p> <p>2. Select the download option</p> <p>GFF3</p> <p>Download</p> <p><small>Note: Only BioHealthBase genes can be downloaded</small></p>	<p>1. Select BioHealthBase genes for Database Search</p> <p>2. Select the Database Search</p> <p>Epitope Search</p> <p>Redirect</p> <p><small>Note: Only BioHealthBase genes can be selected</small></p>	<p>1. Select BioHealthBase genes and/or external sequences for analysis</p> <p>2. Select the sequence type</p> <p>Amino Acid</p> <p>3. Select the program</p> <p>BLAST</p> <p>Analyze</p>

Click to delete all items

 - Delete

BioHealthBase Genes											
All	Gene Symbol	Gene Product Name	Segment	SubType	Host	Year	Genebank Genomic Accession	UniProtKB Accession	Geographic Location	Organism	GBrowse
<input type="checkbox"/>	PA	PA polymerase subunit	3	H3N2	Human	1994	U71136	Q9YP14	Japan	Influenza A Virus A/Akita/1/94	View GBrowse
<input type="checkbox"/>	PA	PA polymerase subunit	3	H3N2	Human	1995	U71137	Q9YP13	Japan	Influenza A Virus A/Akita/1/95	View GBrowse
<input type="checkbox"/>	PA	PA polymerase subunit	3	H2N2	Human	1965	AY209998	Q6XU43	USA	Influenza A Virus A/Albany/1/65	View GBrowse

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 work