

VBRC Base By Base: Import genome sequences from Virology.ca viral databases

Nick Tang

Abstract

Viral Bioinformatic Resource Centre

- **Provide databases of viral genomic information.**
 - Please check the **Organisms** menu to see which viruses we support: we're now focusing on large DNA viruses
 - The VOCs (Virus Orthologous Clusters) database is at the heart of our system.
 - The database links directly to integrated tools for comparative analyses.
 - VOCs sorts genes into ortholog clusters (e.g. RNA polymerase) to simplify data retrieval.
- **Provide easy access to the genes, gene families, and genomes of the different virus families.**
 - via a unique series of powerful Java tools that support multiple computer platforms (see **VBRC Tools** menu).
 - design and build software to tackle specific bioinformatics/virology problems, often in collaboration with virologists.
- **Rally the research community to provide expert curation of these viral genomes by:**
 - Adding value to GenBank sequences through enhancing and updating genome annotations
 - Linking to research reviews/papers for the research community.
- **Collaborate with researchers to help on specific bioinformatics problems, e.g.**
 - Custom searches of the databases
 - Building new features into our tools
 - Help with genome annotation

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Protocol

Step 1.

From the **"File"** menu, choose **"Add Sequences to Alignment"**.

Step 2.

"From VOCs Database". Select the database and, from the list that appears, your genomes of interest (hold down the *Apple* key (**Mac**) or *CTRL* (**PC**) to select multiple genomes).

Step 3.

Click **OK** to upload the sequences to your alignment.

(Note that these sequences will be unaligned).

Step 4.

To view the file you just created, close the current alignment and open your new file.