Bioinformatics

Lab 8

Proteomics


2) Visit UniProt at https://www.uniprot.org/ Search for annotation information of your project proteins.

2) Protein Subcellular Location Prediction

Read the following paper:


Visit the following website to see tools related to protein analysis http://www.expasy.ch/tools/

then try to practice with your own protein sequences or sequences from the text book or you can get from FunSecKB, FunSecKB2, PlantSecKB, or MetazSecKB at http://bioinformatics.ysu.edu/tools/index.html

SignalP – signal peptide prediction http://www.cbs.dtu.dk/services/SignalP/ (Human insulin P01308 to retrieve it from UniProtKB at http://www.uniprot.org/)


TMHMM – transmembrane domains http://www.cbs.dtu.dk/services/TMHMM-2.0/ (Human cox1 protein Q5S9T0 to retrieve it from UniProtKB).

Read one of the following papers to understand more on the databases we developed:


Other papers


More tools at:
http://bioinformatics.ysu.edu/tools/subcell.html