Running MitoProt from gene record pages.
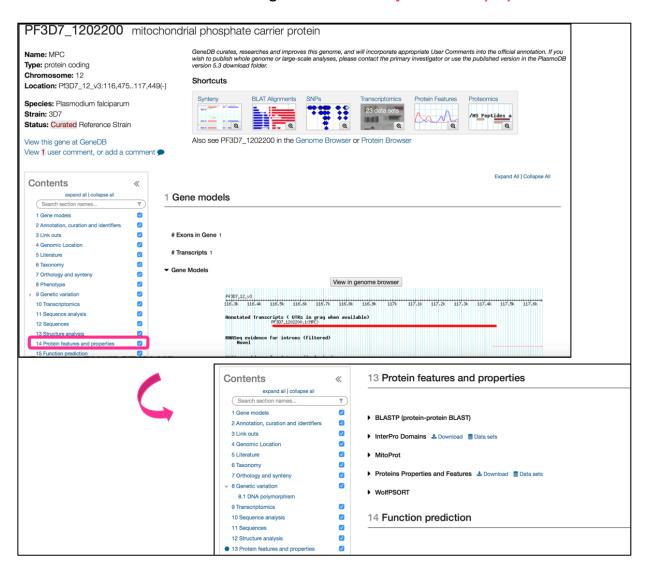
MitoProt II software predicts mitochondrion-related proteins by calculating the N-terminal protein region that can support a Mitochondrial Targeting Sequence (MTS) and the cleavage site.

1. **Navigate to a gene record page of your choice (e.g. PF3D7_0214200 gene of *Plasmodium falciparum* 3D7:** http://plasmodb.org/plasmo/app/record/gene/PF3D7_0214200)
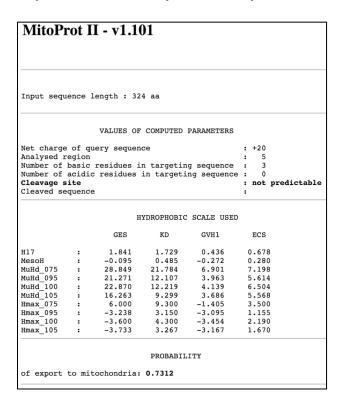
2. **Use the *Contents* menu to navigate to the *Protein features and properties menu***

3. **Select the *MitoProt* and click on the *Submit* button to initiate a query:**

▼ MitoProt

Submit

For more information about this tool click here

4. **A new tab will be opened automatically to redirect you to the MitoProt II results page:**

MitoProt II - v1.101

```
Input sequence length : 324 aa


             VALUES OF COMPUTED PARAMETERS

Net charge of query sequence                   : +20
Analysed region                                :    5
Number of basic residues in targeting sequence :    3
Number of acidic residues in targeting sequence :   0
Cleavage site                                  : not predictable
Cleaved sequence                               :


               HYDROPHOBIC SCALE USED

             GES       KD      GVH1      ECS

H17      :    1.841    1.729    0.436    0.678
MesoH    :   -0.095    0.485   -0.272    0.280
MuHd_075 :   28.849   21.784    6.901    7.198
MuHd_095 :   21.271   12.107    3.963    5.614
MuHd_100 :   22.870   12.219    4.139    6.504
MuHd_105 :   16.263    9.299    3.686    5.568
Hmax_075 :    6.000    9.300   -1.405    3.500
Hmax_095 :   -3.238    3.150   -3.095    1.155
Hmax_100 :   -3.600    4.300   -3.454    2.190
Hmax_105 :   -3.733    3.267   -3.167    1.670


                   PROBABILITY

of export to mitochondria: 0.7312
```

Useful links:
1. MitoProt II: https://ihg.gsf.de/ihg/mitoprot.html

2. MitoProt II Help page (including parameter descriptions):
   https://ihg.gsf.de/ihg/mitophelp.html: https://ihg.gsf.de/ihg/mitophelp.html