ProtScale: The website is part of the larger ExPASy group of software that does **both** Hydrophobicity and Chou-Fasman Secondary Structure predictions. URL: https://web.expasy.org/protscale/

*NOTE:*URL for the TMHMM part -> *https://dtu.biolib.com/DeepTMHMM*

Antiparallel beta-strand   Parallel beta-strand
A.A. composition   A.A. comp. in Swiss-Prot
Relative mutability

Window size: 9   ← Changes size of sliding window
Relative weight of the window edges compared to the window center (in %): 100
Weight variation model (if the relative weight at the edges is < 100%): ⊙ linear ○ exponential
Do you want to normalize the scale from 0 to 1? ○ yes ⊙ no

If you need more information about how to set these parameters, please click here.

Submit   Reset

Hit Submit
Produces predictions

Peaks indicate predicted regions of Hydrophobicity

Y-Axis:
Hydrophobicity
Score. The higher
the peak the
more hydrophobic
the region.

ProtScale output for user sequence
Hphob. / Kyte & Doolittle
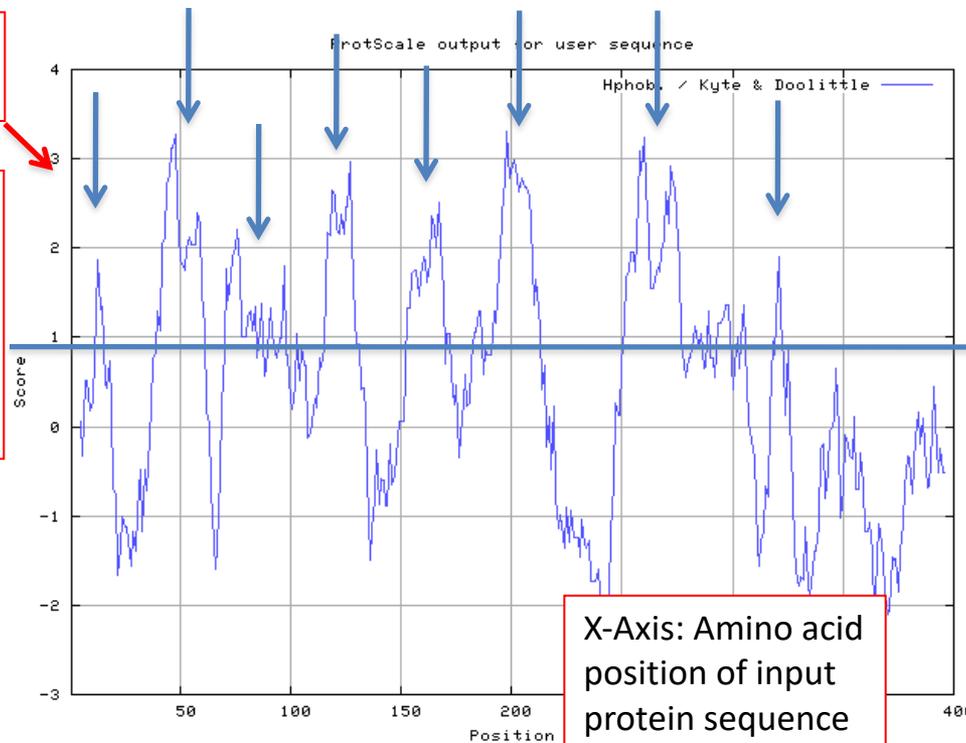
X-Axis: Amino acid
position of input
protein sequence

Select a <u>different radio button</u> to perform **alpha-helix, beta-sheet**, or many other single-sequence protein analyses.

○ Molecular weight	○ Number of codon(s)
○ <u>Bulkiness</u>	○ Polarity / Zimmerman
○ Polarity / Grantham	○ ~~Refractivity~~
○ Recognition factors	○ Hphob. / Eisenberg et al.
○ Hphob. OMH / Sweet et al.	○ ~~Hphob. / Hopp & Woods~~
○ Hphob. / Kyte & Doolittle	○ Hphob. / Manavalan et al.
○ Hphob. / Abraham & Leo	○ Hphob. / Black
○ Hphob. / Bull & Breese	○ Hphob. / Fauchere et al.
○ Hphob. / Guy	○ Hphob. / Janin
○ Hphob. / Miyazawa et al.	○ Hphob. / Rao & Argos
○ Hphob. / Roseman	○ Hphob. / Tanford
○ Hphob. / Wolfenden et al.	○ Hphob. / Welling & al
○ Hphob. HPLC / Wilson & al	○ Hphob. HPLC / Parker & al
○ Hphob. HPLC pH3.4 / Cowan	○ Hphob. HPLC pH7.5 / Cowan
○ Hphob. / Rf mobility	○ HPLC / HFBA retention
○ HPLC / TFA retention	○ Transmembrane tendency
○ HPLC / retention pH 2.1	○ HPLC / retention pH 7.4
○ % buried residues	○ % accessible residues
○ Hphob. / Chothia	○ Hphob. / Rose & al
○ Ratio hetero end/side	○ Average area buried
○ Average flexibility	● alpha-helix / Chou & Fasman
○ beta-sheet / Chou & Fasman	○ beta-turn / Chou & Fasman
○ alpha-helix / Deleage & Roux	○ beta-sheet / Deleage & Roux
○ beta-turn / Deleage & Roux	○ Coil / Deleage & Roux
○ alpha-helix / Levitt	○ beta-sheet / Levitt
○ beta-turn / Levitt	○ Total beta-strand
○ Antiparallel beta-strand	○ Parallel beta-strand
○ A.A. composition	○ A.A. comp. in Swiss-Prot
○ Relative mutability	

For alpha-helix predictions