Predicting membrane protein types by incorporating a novel feature set into Chou's general PseAAC

E. Siva Sankari , Dr. D. Manimegalai

PII: S0022-5193(18)30356-4
DOI: 10.1016/j.jtbi.2018.07.032
Reference: YJTBI 9557

To appear in: *Journal of Theoretical Biology*

Received date: 22 March 2018
Revised date: 27 June 2018
Accepted date: 23 July 2018

Please cite this article as: E. Siva Sankari , Dr. D. Manimegalai , Predicting membrane protein types by incorporating a novel feature set into Chou's general PseAAC, *Journal of Theoretical Biology* (2018), doi: 10.1016/j.jtbi.2018.07.032

Highlights

- Novel feature set to predict membrane protein types is proposed.
- Performance of decision tree classifiers such as Decision tree, CART, Adaboost, RUS boost, Rotation forest and Random forest are compared in predicting membrane protein types.
- Novel feature set with less number of features than existing feature set performs equivalent to the existing feature set.
- New dataset is used
- Random forest and Adaboost performs well.