

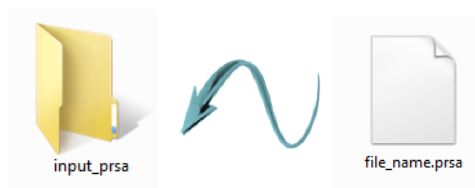
# How to use LORIS?

## LOGistic REGression based Interaction Sites predictor

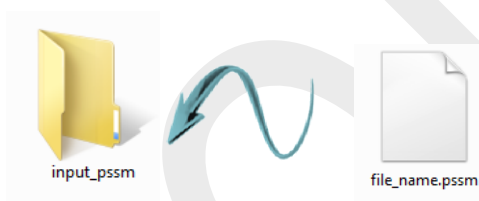
**Step 0)** In the folder **LORIS**, you should see four folders along with this **README** file.

- 1) codes
- 2) input\_prsa
- 3) input\_pssm
- 4) Output

**Step 1)** Solvent Accessibility: Upload your fasta file on [SANN](#). Then once SANN completes running the job, go to '[download results](#)'. Download the **\*.prsa** file and copy it into the folder **input\_prsa**.



**Step 2)** PSSM: Upload your fasta file on [PSI-BLAST server](#) or your locally installed server. Take the **\*.pssm** file and copy it into the folder **input\_pssm**.



**Step 3)** Ensure that the filenames (i.e. 'file\_name' in the pictures) of both the files (the .prsa and the .pssm files) are the same for a particular protein.

Eg. 1acb\_l.prsa and 1acb\_l.pssm ✓

1acb\_l.prsa and 3h4s\_A.pssm ✗

1acb\_l.prsa and 1acbl.pssm ✗

1acb\_l.prsa and 1Acb\_l.pssm ✗

**Step 4)** Execute the code: Go to Terminal. And then execute the **loris.py** file in python by typing:  
**python <space> (path of directory)/LORIS/codes/loris.py**

L1 logistic regression based classifier source: [http://www.stanford.edu/~boyd/l1\\_logreg/](http://www.stanford.edu/~boyd/l1_logreg/)

**Step 5)** You should get an output like this. Go to the folder **Output** to get your output file in **\*.vloris** (vertically aligned) format and **\*.hloris** (horizontally aligned) format.



**Note:**

- (i) You can also use **LORIS** for prediction of multiple proteins by placing multiple files in the **input\_prsa** and **input\_pssm** folders. You just need to ensure that two files representing the same protein should have the same name i.e. they follow the above given format.
- (ii) Before you run your protein files, it is suggested to run the three example files that have been supplemented.
- (iii) LORIS is suited for UNIX based Operating Systems.

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For more information on LORIS or to report any bugs, feel free to mail at [suku@goa.bits-pilani.ac.in](mailto:suku@goa.bits-pilani.ac.in)

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