

What's new?

2016/08/26

“Biological Threshold”

The “Biological Threshold” option has been moved from the “Global Visualization” tab to Panel 3 of the Start Analysis Window (Figure 1A, red square). The “Biological Threshold” is now considered as a global parameter by MEMHDX and is displayed on the Logit representation. Statistically significant peptides with Fractional Uptake Difference values below the user-defined threshold are colored orange (Figure 1 B). The Logit Plot reported below was obtained with the .csv test file provided with MEMHDX using a biological threshold of 4%.

(A)

Statistical Analysis of HDX-MS Experiments

1. To begin your analysis
MEMHDX requires a .csv file (with comma as separator). This file MUST contain the following variables:
Start: Peptide Start position on the protein
End: Peptide End position on the protein
Sequence: Peptide Sequence
State: Name of the conditions (n=2)
Exposure: Value of the exposure time (min)
Replicate: Replicate number (n => 3)
z : Peptide charge
Center: Centroid m/z value
MaxUptake: Maximum number of exchangeable amide hydrogens

2. Select your file
Parcourir... DataTest_MEMHDX.csv
Upload complete
File structure is OK: it contains all variables

3. Options
Statistical significance value (in %)
1
Biological threshold (in %) [4%]
% Deuterium
80

4. Perform analysis
Run Analysis
Clear All
You can download a test .csv file [here](#)

(B)

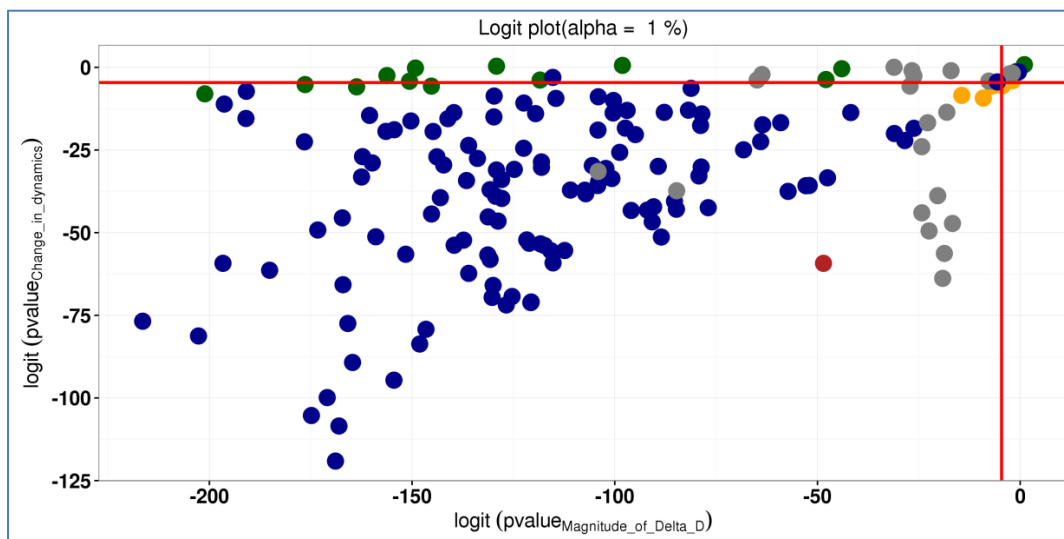


Figure 1. (A) Start Analysis Window of MEMHDX showing the position of the “Biological Threshold” option in Panel 3. (B) Visualization of statistically significant peptides with Fractional Uptake Difference values below the user-defined threshold on the Logit Plot (orange).