

### **Data Preparation**

# Preparing data exported from proteomics software

- prepare\_peaks()
- prepare\_pd()
- prepare\_fragpipe()

# Calculating all possible cleavages of peptide library

- calculate\_all\_cleavages()

## **Data Processing**

Data transformation, normalization, and imputation

- process\_qf()

**Convert to tidy format** 

- mspms\_tidy()

### **Statistics**

# Calculate log2 fold change and perform T-tests

- log2fc\_t\_test()

# Calculate log2 fold change and statistics using limma.

- limma\_stats()

# Visualization

### **Quality control**

- plot\_nd\_peptides()
- plot\_qc\_check()

#### **PCA**

-plot\_volcano()

#### Heatmap

- plot\_heatmap()

### Volcano plot

-plot\_volcano()

#### Time course

- plot\_time\_course()

## iceLogo

-plot\_icelogo()

-plot\_all\_icelogos()

#### Report

Cleavage position plot - plot\_cleavage\_pos()

-generate\_report()

Only a subset of functions are exported to the user in an effort to make the package API intuitive. Helper functions can be found in the helper\_functions.R file name corresponding to the type of functions it assists with.