Package ‘MSGFgui’

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Type Package

Title A shiny GUI for MSGFplus

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Description This package makes it possible to perform analyses using the MSGFplus package in a GUI environment. Furthermore it enables the user to investigate the results using interactive plots, summary statistics and filtering. Lastly it exposes the current results to another R session so the user can seamlessly integrate the gui into other workflows.

License GPL (>= 2)

LazyLoad yes

biocViews MassSpectrometry, Proteomics, GUI, Visualization

VignetteBuilder knitr

Depends mzR, xlsx

Imports shiny, mzID (>= 1.2), MSGFplus, shinyFiles (>= 0.4.0), tools

Suggests knitr, testthat


NeedsCompilation no

R topics documented:

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Description

This package provides a GUI overlay for the MSGFplus package, and by extension the MS-GF+ algorithm for peptide identification in LC-MS/MS data files. Most functionality of the app is hidden behind the function `MSGFgui` which summons the GUI in your browser of choice. Do note that MSGFgui relies on a modern browser that supports HTML5, CSS3 and SVG. This means that people trapped in Internet Explorer 8 and below will probably have trouble getting this to work - but then again they certainly have other things to worry about. Please consult the vignette for a run-through of the functionality exposed in the GUI.

Author(s)

Thomas Lin Pedersen

References

MS-GF+

See Also

`MSGFgui` `currentData` `MSGFplus-package`

currentData

Getter function for accessing the current identification results in the MSGFgui GUI.

Description

This function makes it possible to directly access the data used in the GUI by starting a new R session and running this function. This will only work if just one instance of MSGFgui is running in the browser. The data will linger on so calling `currentData()` when no instance of MSGFgui is running will return the last set of data used.

Usage

`currentData()`

Value

An `mzIDCollection` object containing the current identification results in the MSGFgui browser

Examples

```r
results <- currentData()
```
**MSGFgui**

*Start MSGFgui in the default browser*

**Description**

This function loads the GUI in the user's default browser. Due to some unfortunate problems with shiny, the user needs to refresh the webpage the first time it loads in order for everything to work properly. This will likely be fixed in a coming shiny release. For the time being, MSGFgui is designed to run locally. This means that there is automatic view rights to the full file system of the computer running the server.

**Usage**

```
MSGFgui(...)
```

**Arguments**

... Parameters passed onto `runApp`

**Value**

This function interrupts the R session until the user press escape and has no return value.

**Examples**

- # Default mode
  
  ```r
  MSGFgui()
  ```

- # Pass on parameters to shiny
  
  ```r
  MSGFgui(host='0.0.0.0')
  ```
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