



OmicsHub Proteomics

Raw data to results - Integrated Proteomics Solution

“OmicsHub Proteomics provides a unique end to end proteome solution - from importing peak lists to final report generation - in a user-friendly, flexible and light platform”

A unique integrated proteomics solution

End to end solution

Integrated proteomics solution from protein peak detection to final reports

User-friendly

Light and stable platform with a web interface

Ease of use

No local installation required, immediately deployable

Powerful

Combined results from multiple protein search engines, data analysis yielding accurate results and tracking of parameters and files

Flexible

Compatible with a host of software and instruments with user guided workflow creation and reports in PRIDE format

Intuitive

Real time guide requiring no training to use the software

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OmicsHub Proteomics has been designed as a central data management system to collect, analyze and annotate proteomics experimental data. Users can automate tasks, however OmicsHub Proteomics remains flexible enough to allow manual control of final validation.

OmicsHub Proteomics supports both LC-MSMS and 2D-gel workflows and can be easily extended to meet custom laboratory needs with minimal effort. Its configuration allows users to process experiments in both parallel and concurrent modes simultaneously through customized pipelines. Identified proteins obtained as a result of PMF and/or PFF in the commonly used search engines are processed by OmicsHub Proteomics to remove any redundancies automatically. It provides a quick and clear estimate of how many different protein families have been obtained.

Furthermore, biological information extracted from a dynamic list of sources, including pathways information, can be used to annotate the resulting proteins. This enables better understand of the protein's role according to a specific experiment and/or project.

Proteomics data can be exported in PRIDE format enabling lab users to easily share and publish their experimental results. When providing services externally, custom HTML reports including descriptive images can also be generated by OmicsHub Proteomics. One of the most time consuming task in a proteomics facility laboratory is generating customized reports, however with OmicsHub Proteomics generating customized report takes just a click!

Project lifecycle

1. Import of instrument data

OmicsHub Proteomics has been designed to be widely compatible with mass spectrometer instruments. This enables OmicsHub Proteomics to be compatible with any mass spectrometer irrespective of the make or brand. The import of data is automated and OmicsHub Proteomics guides the user every step of the way.

2. Protein search results

OmicsHub Proteomics has been developed to return results from multiple search engines [e.g. Mascot, Phenyx]. All the search engines can be accessed from within the OmicsHub Proteomics platform and the results can be viewed in the same pane. Updates will include software intelligence to choose the most appropriate search result for a given experiment.

3. Analysis

OmicsHub Proteomics provides powerful analysis and interpretation of data. Once the proteins are identified OmicsHub provides the ability to group these proteins into families removing redundancy. An added feature of OmicsHub Proteomics is that OmicsHub users can automatically retrieve protein annotation. Pathways integration is implemented from within the OmicsHub Proteomics platform.

4. Reporting

OmicsHub Proteomics provides advanced and flexible reporting capabilities. The final reports can be generated in PRIDE format thereby making it easier for the user to adhere to standards. Reports are customizable and can include the entire experiment data or specific outputs as desired by the user.

Features	Benefits
<p>Multiple search engine results OmicsHub Proteomics provides a unique interface from which multiple protein search engines can be accessed. The default search results are returned from Mascot and Phenyx</p>	<p>Multiple sources enable accurate identification of proteins and reduced false negative results</p>
<p>Advanced Compatibility OmicsHub Proteomics allows automatic import of peak lists and compatibility with new instruments can be effortlessly implemented</p>	<p>No compatibility issues</p>
<p>Grouping of protein results Once the protein search results are returned, OmicsHub Proteomics groups similar proteins into families</p>	<p>The grouping of proteins reduces redundancy and makes the process of protein identification more efficient</p>
<p>Protein Annotation and pathways integration (Ingenuity)</p>	<p>Users get direct access to biological information about the proteins identified and the roles they play in an organism</p>
<p>Customizable reports OmicsHub Proteomics enables reports to be customized and gives the option to generate reports in PRIDE format</p>	<p>Enables users to easily adopt proteomics standards like PRIDE and generate relevant reports thereby eliminating the main bottleneck in proteomics core facilities</p>
<p>Tracking OmicsHub Proteomics enables protein search across various experiments</p>	<p>This makes the tracking of data and key parameters extremely efficient and user-friendly</p>

OmicsHub Proteomics Consortium

We are shortly launching the OmicsHub Proteomics Consortium - a limited membership early access program. Consortium members will get the first look into OmicsHub Proteomics and will receive additional benefits which will be announced shortly. Some of the OmicsHub Proteomics Consortium member benefits are:

- Early access to OmicsHub Proteomics
- Direct Influence on OmicsHub Proteomics specifications for future releases based on consortium member needs
- Invitation to Consortium meetings and proteomics knowledge sharing sessions
- Free access to OmicsHub Proteomics web training sessions and industry seminars
- Subscription to OmicsHub Proteomics newsletter

And more

To find out more please register at <http://proteomics.integromics.com>

OmicsHub Proteomics is brought to you by Integromics S.L. Integromics has been the thought leader in the field of bioinformatics for over a decade. With OmicsHub Proteomics Integromics S.L. brings to market it's expertise in the proteomics domain. For more information on Integromics S.L. please visit <http://www.integromics.com>