



InSyBio
Intelligent Systems Biology

User Manual

InSyBio Suite - First Steps

March 2022

Insybio Suite v3.0

www.insybio.com

Welcome to Insybio Suite

InSyBio Suite is an integrated platform providing tools for biological data management, secured storage and analysis based on the Cloud model of Software as a Service (SaaS).

Its present version consists of five basic modules:

- **Interact:** a module offering preprocessing and analysis options for proteomics and interactomics biological data.
- **ncRNAseq:** a module for the analysis of RNA-Seq data and non-coding RNA molecules.
- **BioNets:** a module which enables the application of data mining techniques on gene expression datasets and biological networks.
- **Biomarkers:** a tool for the identification of biomarkers from single and multi-omics datasets combining statistics and machine learning.
- **DNA-Seq:** a tool which enables the fast and accurate pre-processing and analysis of DNA-sequencing data by non-bioinformatics experts with optimized pipelines.
- **Pipelines:** a tool that takes as input a dataset file and after performing statistical and network analytics, it uses the dataset to train a machine learning model identifying at the same time the optimal biomarkers for the trained model.
- **Data Store:** a set of tools for storing and managing biological datasets.

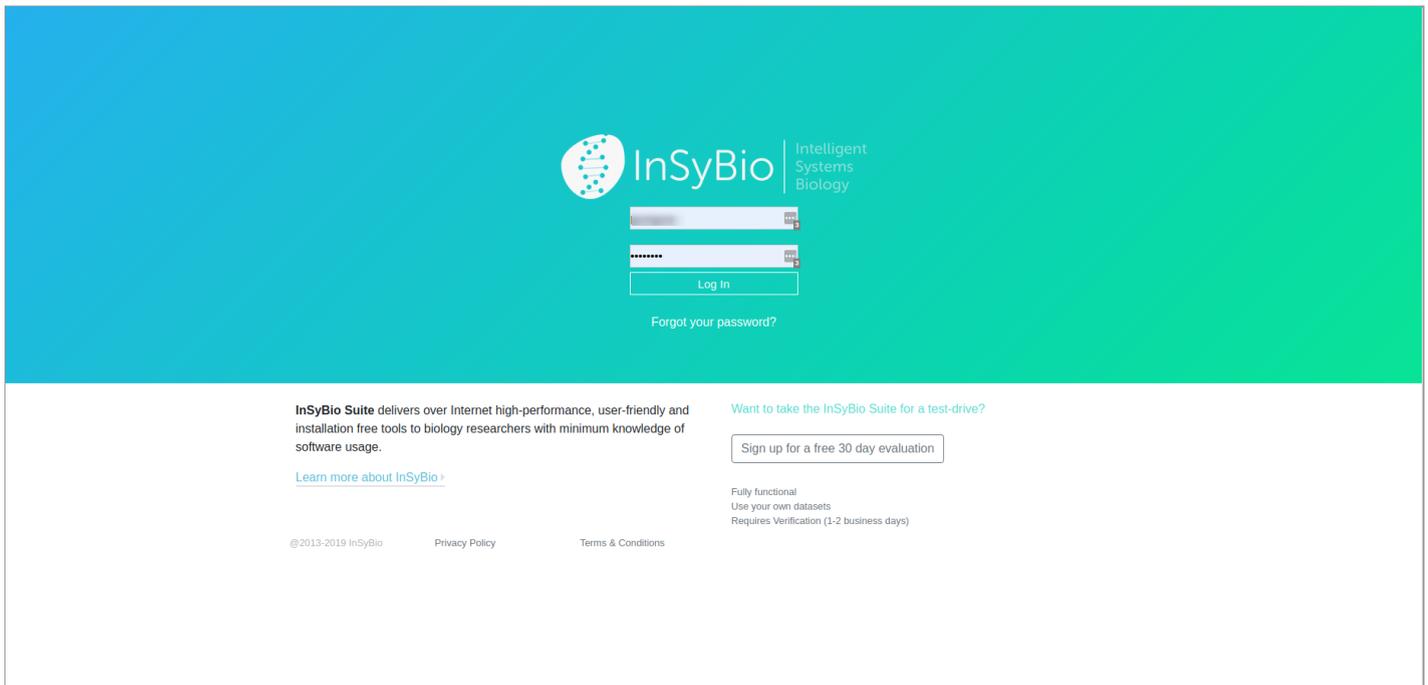
InSyBio Suite is offered by InSyBio LTD and incorporates in its analysis a variety of novel published computational intelligent techniques plus a new method for the functional characterization of proteins.

We will be thankful if you try out InSyBio Suite and provide us your feedback in support@insybio.com.

In the following, the signing up and the logging in procedures are described, as well as the basic functionalities of InSyBio Suite.

Logging in

In the login page you have to enter your email and your password and press the “Login” button.



InSyBio Intelligent Systems Biology

Log In

Forgot your password?

InSyBio Suite delivers over Internet high-performance, user-friendly and installation free tools to biology researchers with minimum knowledge of software usage.

[Learn more about InSyBio](#)

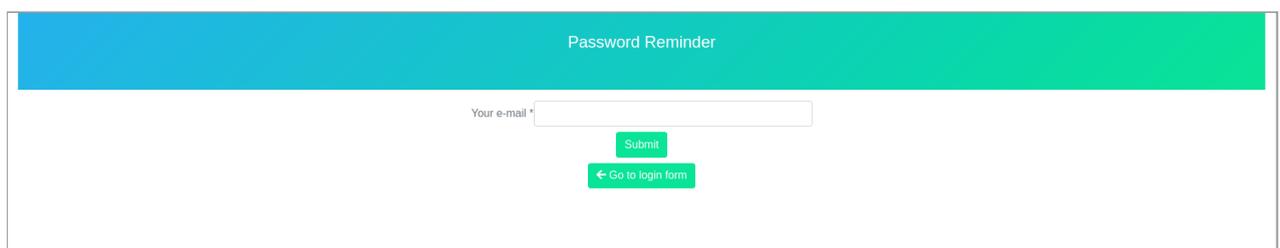
Want to take the InSyBio Suite for a test-drive?

Sign up for a free 30 day evaluation

Fully functional
Use your own datasets
Requires Verification (1-2 business days)

@2013-2019 InSyBio Privacy Policy Terms & Conditions

In case you have forgotten your password, you can click the respective link. In the page you will be redirected to, you have to enter your email and your password will be sent to you.



Password Reminder

Your e-mail *

Submit

← Go to login form

By clicking the “Learn more about InSyBio” there is an overview about the tools that InSyBio Suite delivers and the corresponding manuals.

Welcome to InSyBio Suite

InSyBio Suite delivers over Internet high-performance, user-friendly and installation free tools to biology researchers with minimum knowledge of software usage. It is based on a series of patented or in the process of getting a patent pipelines, algorithms and tools that have been recognized and awarded by the academic community. Using InSyBio Suite, biology researchers can save time and a significant amount of money while reassuring high performance and robustness in their data analysis.

The current version of InSyBio Suite includes the following tools:

[InSyBio Suite - First Steps Manual](#)



InSyBio Interact

A tool offering preprocessing and analysis options for proteomics and interactomics biological data and prediction of protein interactions.

[InSyBio Interact Manual](#)



InSyBio ncRNAseq

A tool for the analysis of non-coding RNA molecules and extraction of biomarkers from them.

[InSyBio ncRNAseq Manual](#)



InSyBio BioNets

A tool which enables the application of data mining techniques on biological networks and the analysis of transcriptomics datasets for biomarker discovery.

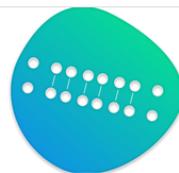
[InSyBio BioNets Manual](#)



InSyBio Biomarkers

A tool for the identification of biomarkers from single and multi-omics datasets combining statistics and machine learning.

[InSyBio Biomarkers Manual](#)



InSyBio DNaseq

A tool which enables the fast and accurate pre-processing and analysis of DNA-sequencing data by non-bioinformatics experts with optimized pipelines.

[InSyBio DNaseq Manual](#)



InSyBio Pipelines

A tool that takes as input a dataset file and after performing statistical and network analytics, it uses the dataset to train a machine learning model identifying at the same time the optimal biomarkers for the trained model.

[InSyBio Pipelines Manual](#)



InSyBio Data Store

A set of tools for storing and managing biological datasets.

[InSyBio Data Store Manual](#)

Corresponding version: 2.7, Date: March 2022.

For more details about InSyBio's services and for downloading the latest white papers of InSyBio tools please visit www.insybio.com

[← Go back](#)

InSyBio Suite Graphical Environment

Upper toolbar

In the upper toolbar of InSyBio Suite, pressing on your username you can update your profile, change your password, go to the settings page or logout from the account.

The screenshot displays the InSyBio Suite graphical environment. At the top, a blue header bar contains the text "Welcome to InSyBio Suite". To the right of the header, a user profile dropdown menu is visible, showing the username "InSyBio Beta User" and options for "Profile", "Settings", and "Log out".

The main content area is divided into several panels:

- ncRNASeq Jobs:**
 - ID 82: RNA-Seq Differential Expression Pipeline (Error)
 - ID 85: RNA-Seq Differential Expression Pipeline (Running)
 - ID 84: RNA-Seq Differential Expression Pipeline (Error)
 - ID 83: RNA-Seq Differential Expression Pipeline (Error)
 - ID 12: miRNA Target Site Features Calculation (Completed)
- Interact Jobs:**
 - ID 35: Enrichment Analysis (Completed)
 - ID 68: Network Creation (Error)
 - ID 34: Enrichment Analysis (Error)
 - ID 67: Network Creation (Error)
 - ID 33: Enrichment Analysis (Completed)
- DNaseq Pipeline Jobs:**
 - ID 19: DNA-Seq Pipeline (Completed)
 - ID 18: DNA-Seq Pipeline (Completed)
 - ID 17: DNA-Seq Pipeline (Completed)
 - ID 16: DNA-Seq Pipeline (Completed)
 - ID 15: DNA-Seq Pipeline (Completed)
- Biomarkers Jobs:**
 - ID 59: Dataset Preprocessing (Error)
 - ID 55: Training Multi-biomarker Predictive Analytics Model (Pending)
- Bionets Jobs:**
 - ID 48: Combine Networks (Completed)

A sidebar on the left lists the main components of the suite: InSyBio Interact, InSyBio ncRNASeq, InSyBio Bionets, InSyBio Biomarkers, InSyBio DNA-Seq, InSyBio Pipelines, and InSyBio DataStore. At the bottom right, there is a section for "InSyBio Suite Manuals" with links to "First Steps", "Interact", "ncRNASeq", "BioNets", "Biomarkers", "DNASeq", "Pipelines", and "Data Store".

When updating your profile you can change your full name, address, organization and country. You cannot change your email though you can manage your email notifications.

InSyBio Suite - User Profile

InSyBio Beta User

User Profile

Fields with * are required.

Email* info@insybio.com
You cannot change your e-mail.

Name* InSyBio Beta User
Please fill your full name.

Address

Organization* InSyBio Ltd.
Please fill your organization and department.

Country* United Kingdom

Manage your e-mail notifications

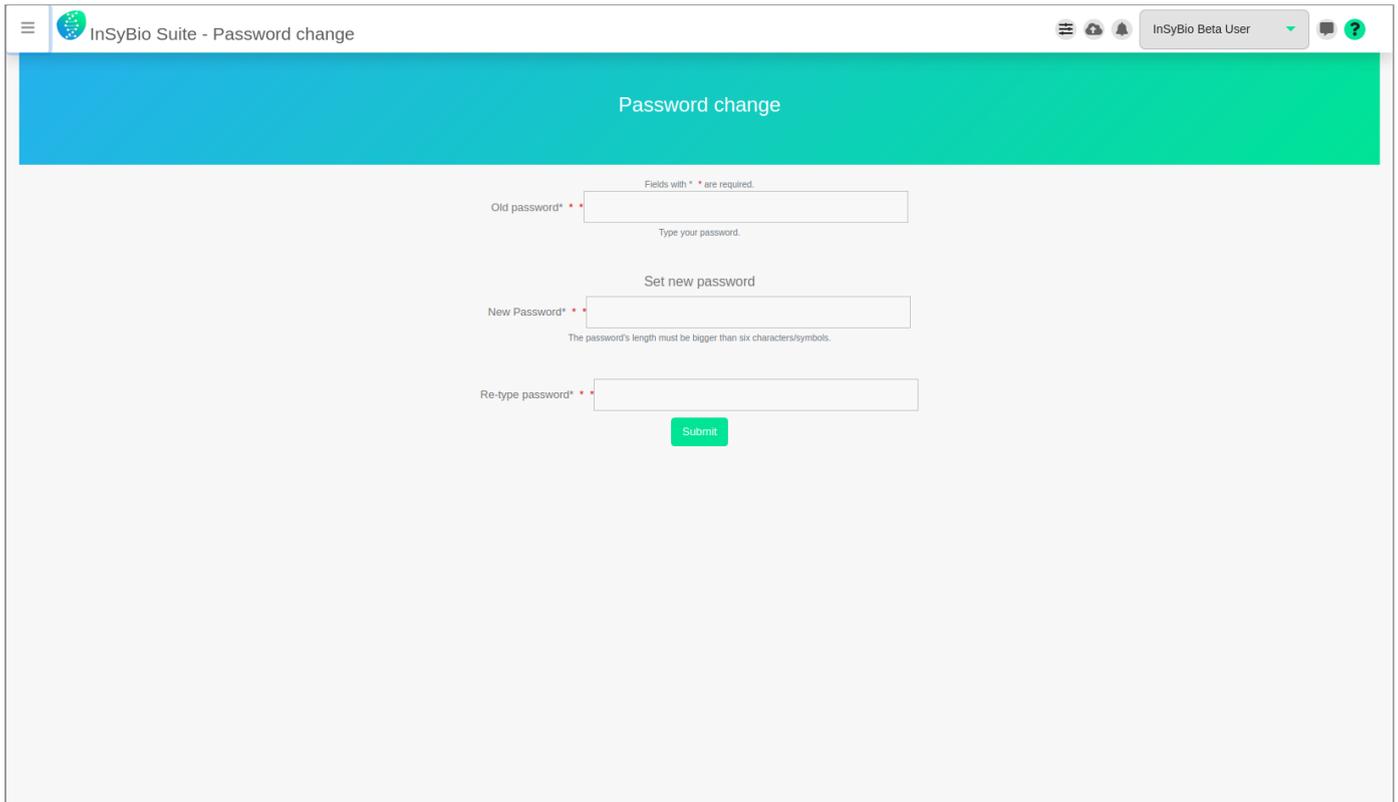
Receive InSyBio Suite news by e-mail

Receive Notification e-mail when your profile changes

Receive Notification e-mail when your password changes

Submit

When changing your password, you have to provide your old password and type twice your new password.



The screenshot shows a web browser window with the title "InSyBio Suite - Password change". The browser's address bar shows "InSyBio Beta User". The page has a teal header with the text "Password change". Below the header, there are three input fields for password change:

- Old password***: A text input field with a red asterisk. Above it, the text "Fields with * are required." is displayed. Below the field, the text "Type your password." is displayed.
- New Password***: A text input field with a red asterisk. Above it, the text "Set new password" is displayed. Below the field, the text "The password's length must be bigger than six characters/symbols." is displayed.
- Re-type password***: A text input field with a red asterisk.

Below the input fields is a green "Submit" button.

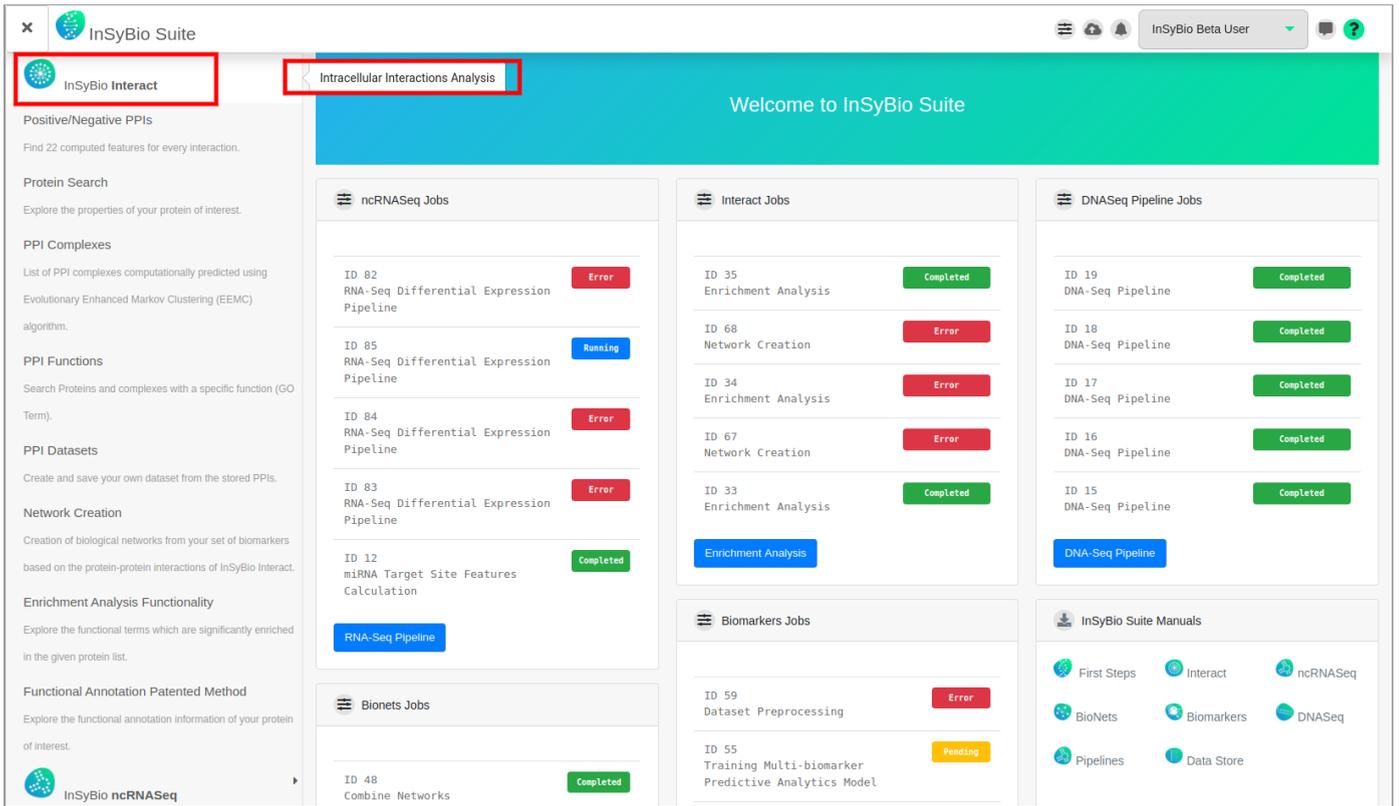
Left menu

In the left menu of InSyBio Suite you can select the tool you would like to use. Tools user manuals can be found on the landing page.

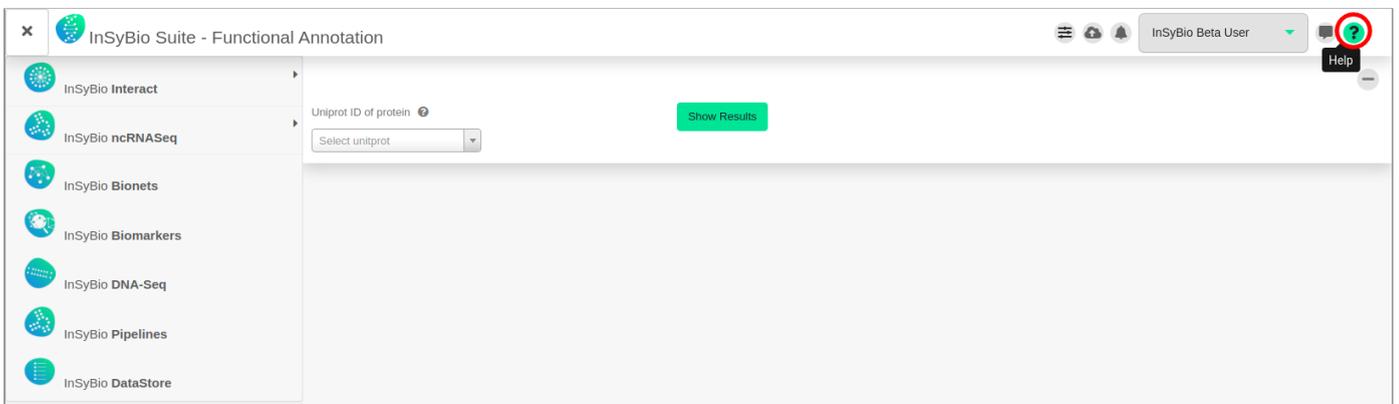
The screenshot displays the InSyBio Suite dashboard with the following components:

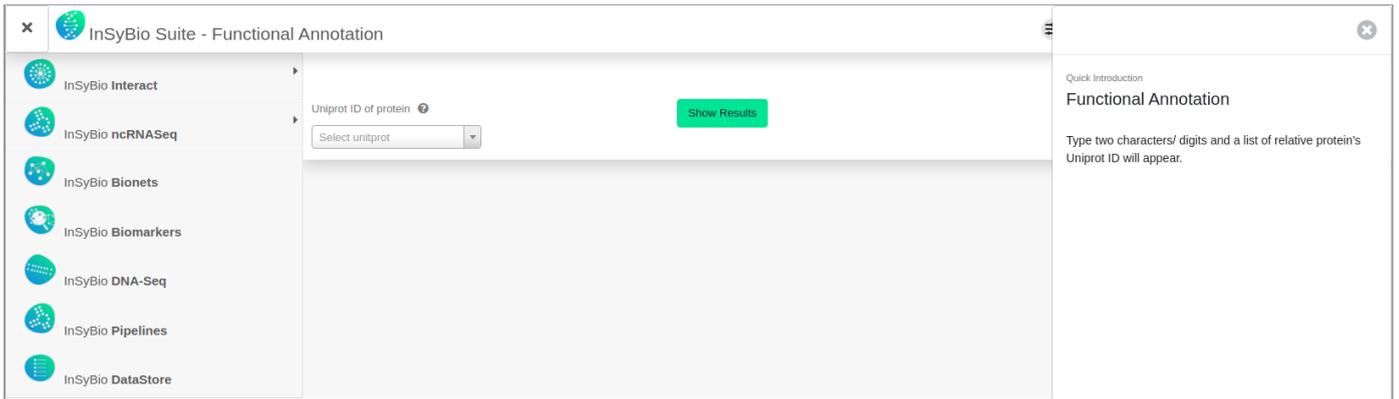
- Header:** InSyBio Suite logo, user profile 'InSyBio Beta User', and notification icons.
- Jobs List (Left):**
 - ID 84: RNA-Seq Differential Expression Pipeline (Error)
 - ID 83: RNA-Seq Differential Expression Pipeline (Error)
 - ID 12: miRNA Target Site Features Calculation (Completed)
 - RNA-Seq Pipeline button
- Bionets Jobs (Middle-Left):**
 - ID 48: Combine Networks (Completed)
 - ID 47: Biological Network Analysis (Completed)
 - ID 46: Combine Networks (Completed)
 - ID 45: Biological Network Clustering (Completed)
 - ID 44: Biological Network Clustering (Completed)
 - Bionets button
- Jobs List (Middle-Right):**
 - ID 67: Network Creation (Error)
 - ID 33: Enrichment Analysis (Completed)
 - Enrichment Analysis button
 - ID 59: Dataset Preprocessing (Error)
 - ID 55: Training Multi-biomarker Predictive Analytics Model (Pending)
 - ID 54: Biomarkers Dataset Statistical Analysis (Completed)
 - ID 53: Biomarkers Dataset Statistical Analysis (Completed)
 - Biomarkers button
- Jobs List (Right):**
 - ID 16: DNA-Seq Pipeline (Completed)
 - ID 15: DNA-Seq Pipeline (Completed)
 - DNA-Seq Pipeline button
- InSyBio Suite Manuals (Red Box):**
 - First Steps
 - Interact
 - ncRNASeq
 - BioNets
 - Biomarkers
 - DNaseq
 - Pipelines
 - Data Store
- InSyBio Suite White papers:**
 - ncRNASeq
 - RNA-Seq Pipeline
 - BioNets
- Footer:**
 - Corresponding version: 2.7, Date: March 2022
 - For more details about InSyBio's services and for downloading the latest white papers of InSyBio tools please visit www.insybio.com.

For some tools, you can find their subtools pressing the respective arrow.

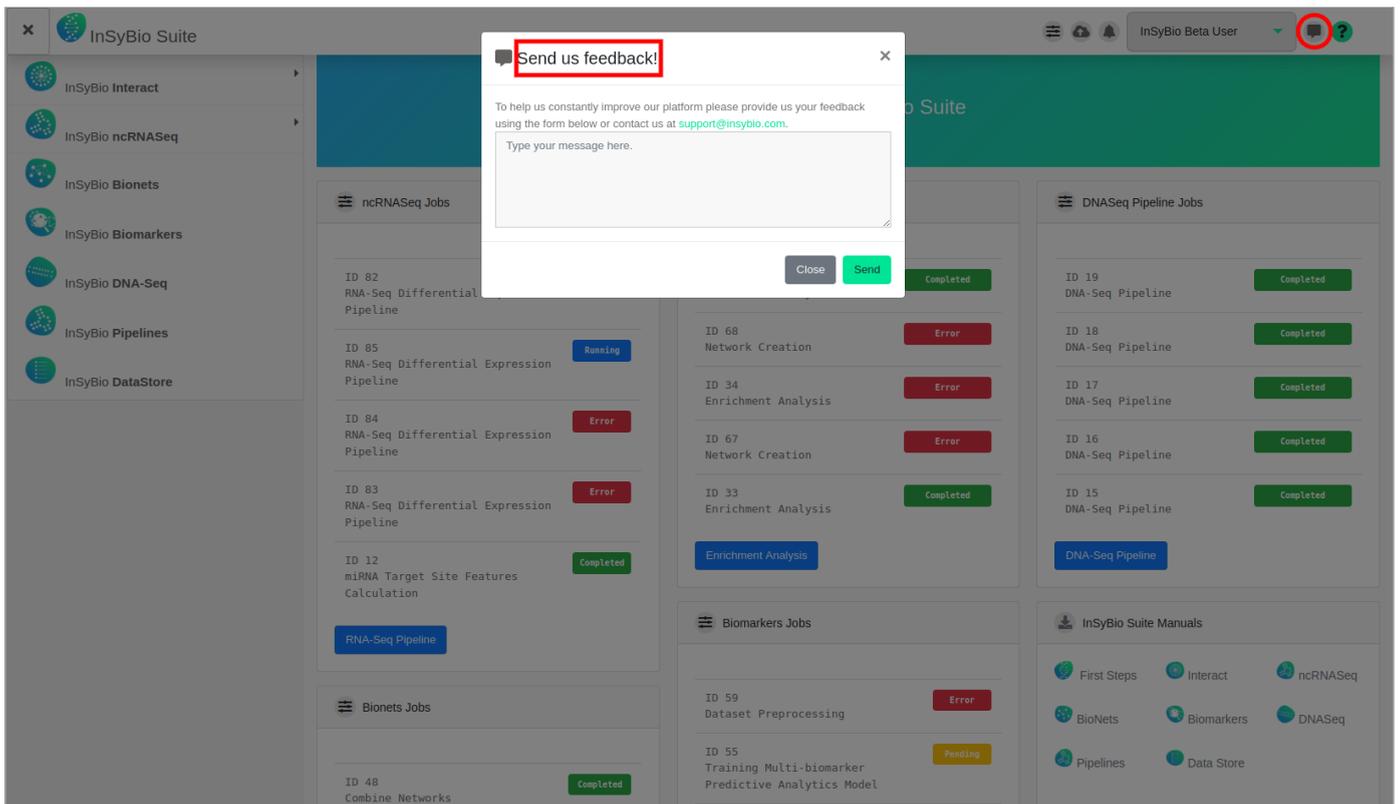


When inside a tool, help is provided through the upper right help button.





On the upper right of the toolbar, there is also a feedback button. Clicking on the feedback button, a message asks you to provide your feedback at support@insybio.com.



How to get InSyBio Suite

To request a free one month license of InSyBio Suite please email us at info@insybio.com.

To purchase InSyBio Suite commercial version 3.0 please contact us at sales@insybio.com.

About Us

InSyBio Ltd is a bioinformatics pioneer company (www.insybio.com) in personalized healthcare, that focuses on developing computational frameworks and tools for the analysis of complex life-science and biological data in order to develop predictive integrated biomarkers (biomarkers of various categories) with increased prognostic and diagnostic aspects for the personalized Healthcare Industry.

InSyBio Suite consists of tools for providing integrated biological information from various sources, while at the same time it is empowered with robust, user-friendly and installation-free bioinformatics tools based on intelligent algorithms and methods.

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