

iRC Pro

(Not for diagnostic use)

User guide
2016

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Overview

iRC Pro is a software for data processing of concentration and intensity tests of injection triple quadrupole mass spectrometry (FI/MS/MS) data generated by Thermo Scientific Xcalibur software. The tests can be concentrations and equations of concentrations.

Warning! iRC Pro IS NOT FOR DIAGNOSTIC USE.

Release notes

v1.3.0.5 minor upgrade

- support for Foundation 3.0 e Xcalibur 3.0

v1.3.0.0 major upgrade

- support for Foundation 3.0 e Xcalibur 3.0
- changes in UI for Formula and Concentration tests
- improved ranges management.

v1.2.0.0 major upgrade

- fixed some bugs
- new setup and upgrade procedure
- improved results excel and text file export

v1.1.0.7 minor upgrade

- improved database restore procedure

v1.1.0.0 first release

Requirements

To install IRcPro you need a pc with these requirements:

Supported operating systems:

- Windows XP SP3
- Windows 7 SP1 (x86 and x64)
- Windows 8 (x86 and x64)
- Windows Server 2008 R2 SP1 (x64)
- Windows Server 2012 (x64)

Supported architectures:

- 32-bit (x86)
- 64-bit (x64)

Hardware requirements:

- 1.6 GHz or faster processor
- 1 GB of RAM (1.5 GB if running on a virtual machine)
- 10 GB of available hard disk space

Software requirements:

- Xcalibur & Thermo Foundation 2.0 or above
- Microsoft SqlServer 2008 (it can be installed during IRcPro setup)
- Microsoft Windows installer 4.5 (on Windows 7 or Windows 8 it's already part of the SO; on Windows XP it can be installed during IRcPro setup)
- Microsoft .Net Framework 3.51 (on Windows 7 or Windows 8 it's already part of the SO; on Windows Xp; it can be installed during IRcPro setup)

Setup

Read the topics bellow to learn how to install and configure iRC Pro software.

Setup by DVD

To setup iRC Pro from CD/DVD you have to :

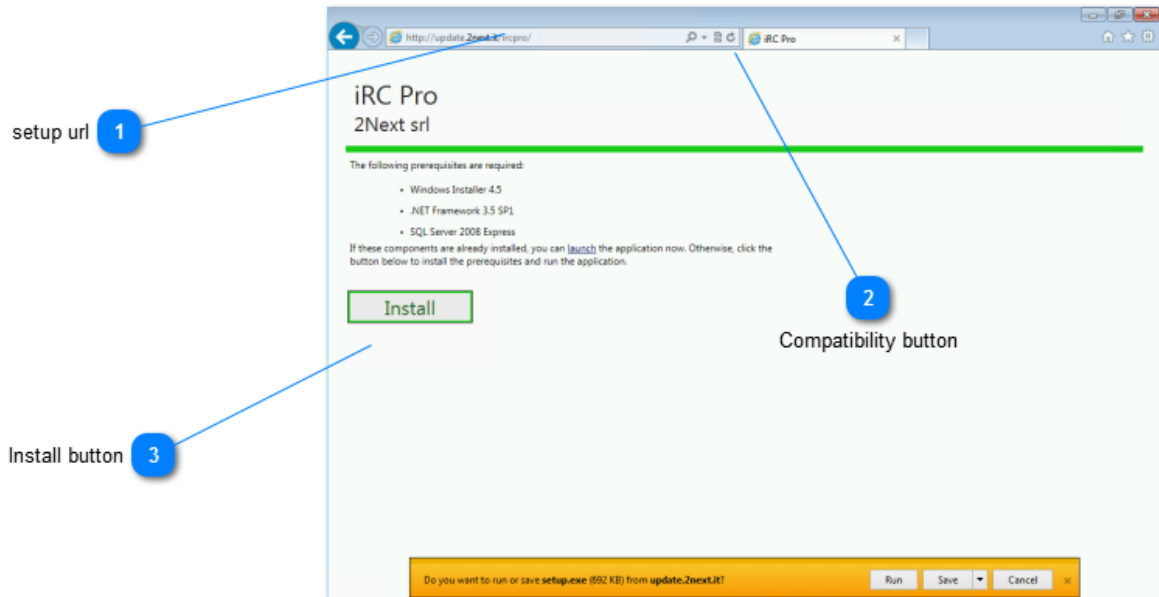
1. Insert CD/DVD
2. If autorun doesn't start open cd/dvd with explorer and click on setup.exe
3. Follow instructions
4. When iRC Pro is installed go to [Licensing section](#)

Setup by Internet

Setup from Internet can be performed without having installation cd. If the software is installed by Internet, each time the application runs, it checks for an update and asks to install the upgrade. Here below it is explained the procedure to install the software.

step 1 - Install from url

Go to [setup url](http://update.2next.it/ircpro/) and click to Install to perform setup.



1

setup url

<http://update.2next.it/ircpro/>

Go to the following url
<http://update.2next.it/ircpro/>

2

Compatibility button



If you have problem to view the page and your browser is IE8 or later try to click on compatibility button and retry.

3

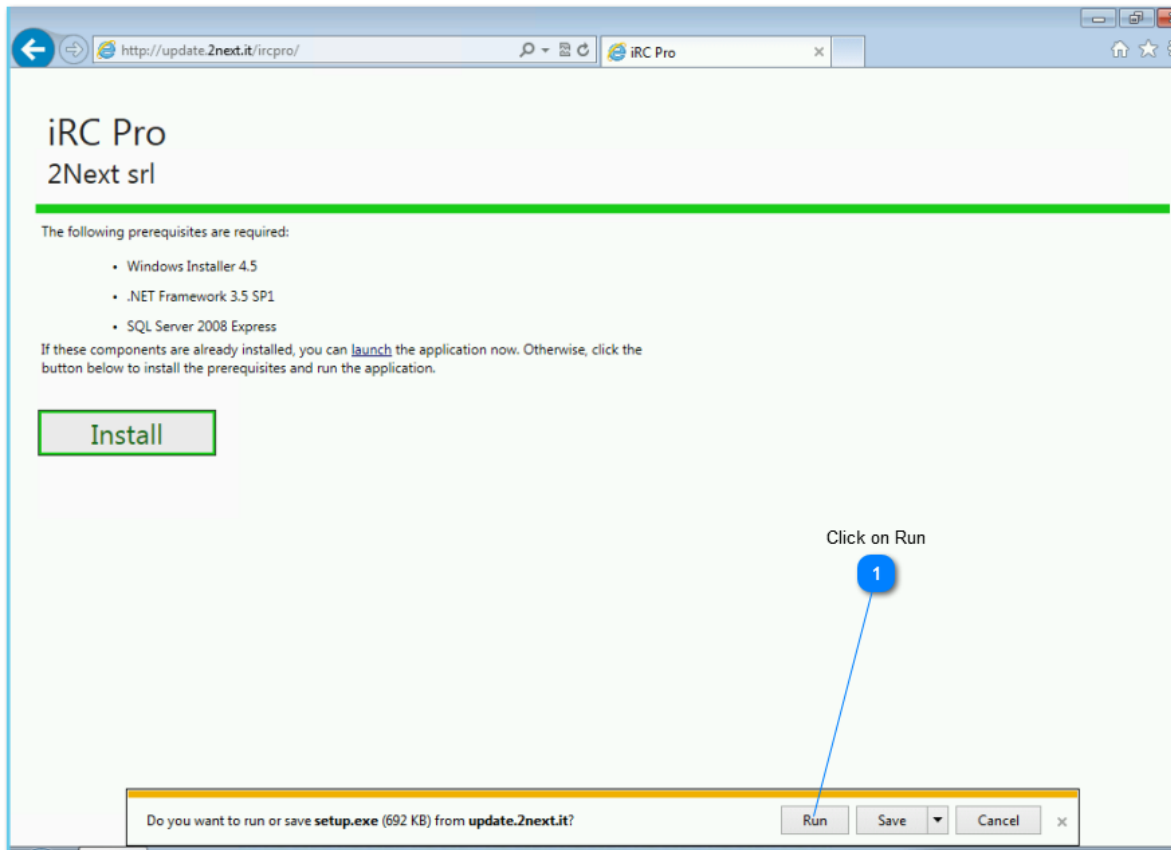
Install button

Install

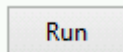
Click **Install** to start the setup.

step 2 - Click on Run

Click on Run button to start setup process. Click on Yes when some window appears to install component. If a reboot is needed please click yes or restart your pc before proceeding.

**1**

Click on Run

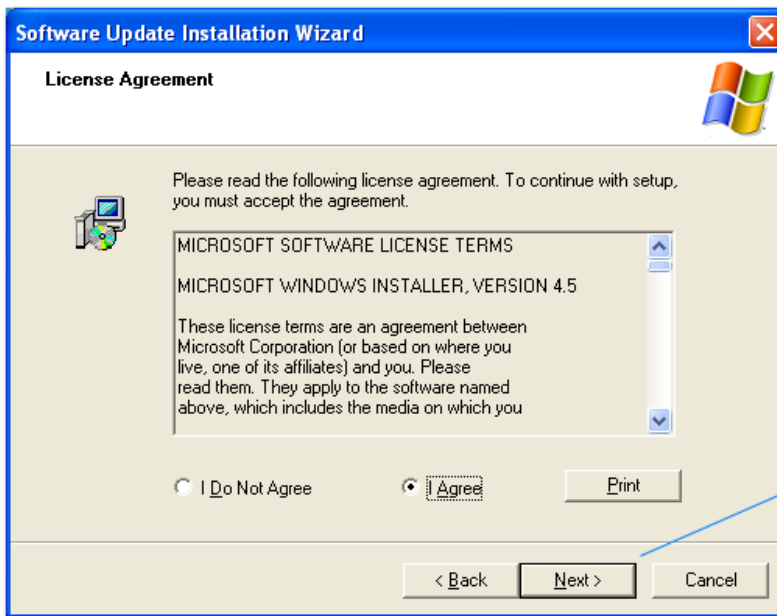


Depend on your browser you have to confirm your choice.
In IE8 or later you have to click on **Run** button.

step 3 - Accept Windows Installer 4.5 setup

Warning: If you have Windows 7 or Windows server 2008 or later, you maybe already have this component so this window will not appear.

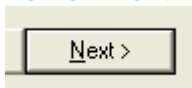
Click on Start button to run application.



1 Click on Next

1

Click on Next



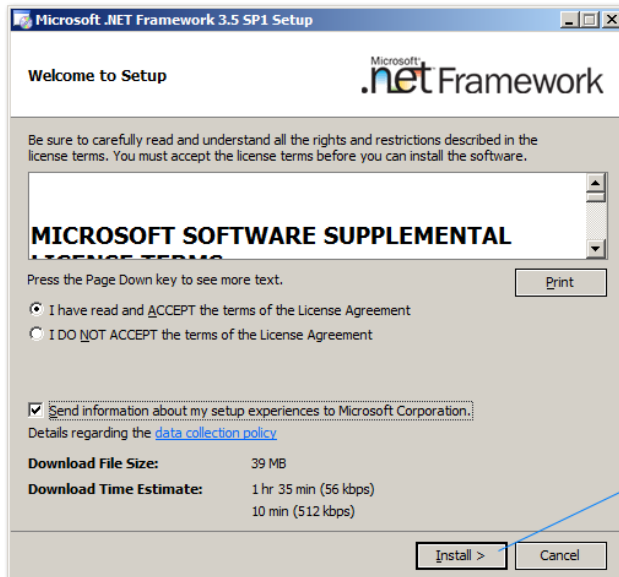
IRCPPro needs some prerequisites to work. One of these is Windows Installer 4.5. Click on **Next** button to confirm Windows Installer 4.5 component setup.

Warning: If you have Windows 7 or Windows server 2008 or later, you maybe already have this component so this window will not appear.

step 4 - Accept Microsoft .Net Framework 3.5 sp1 setup

Warning: If you have Windows 7 or Windows server 2008 or later, you maybe already have this component so this window will not appear.

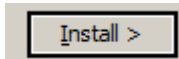
Click on Start button to run application.



1 Click on Install

1

Click on Install

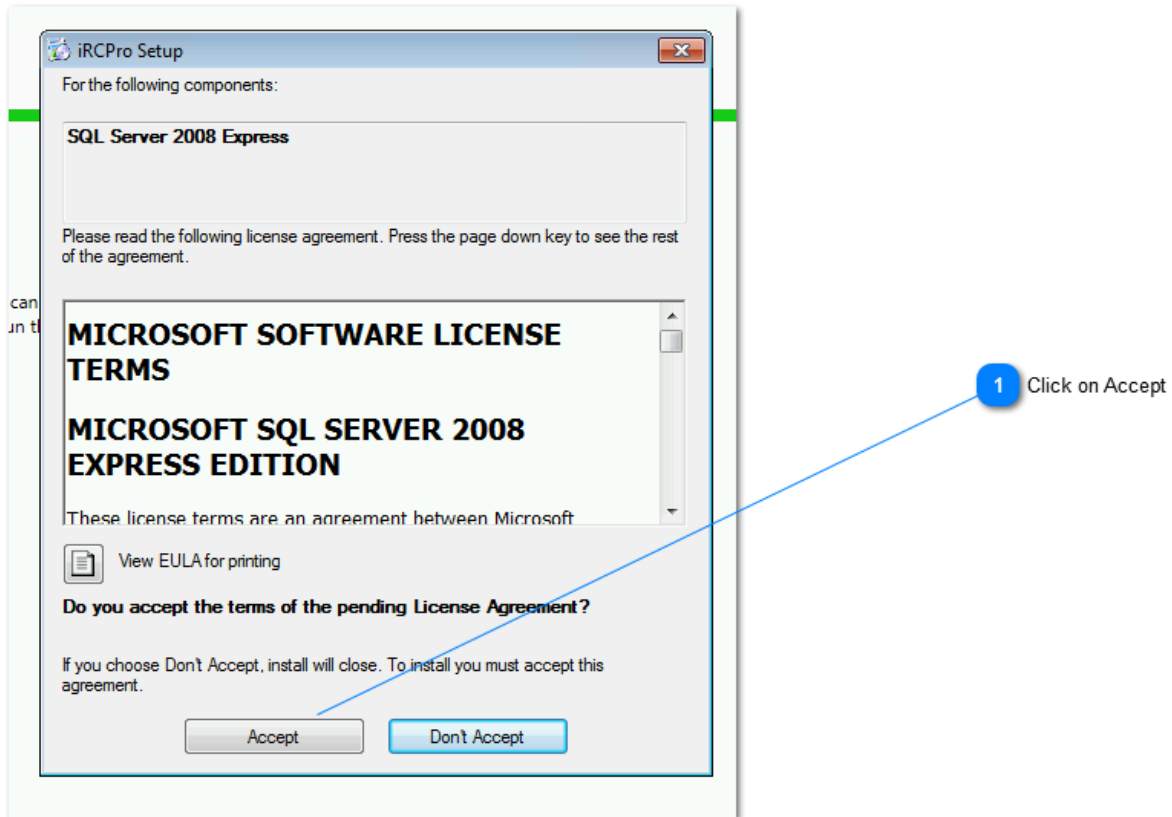


IRCPPro needs some prerequisites to work. One of these is .net framework 3.5 sp1. Click on **Install** button to confirm .Net framework 3.5 sp1 components setup.

Warning: If you have Windows 7 or Windows server 2008 or later, you maybe already have this component so this window will not appear.

step 5 - Accept Sqlserver 2008 express setup

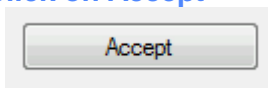
Click on Start button to run application.



When application is installed than go to [Licensing section](#)

1

Click on Accept

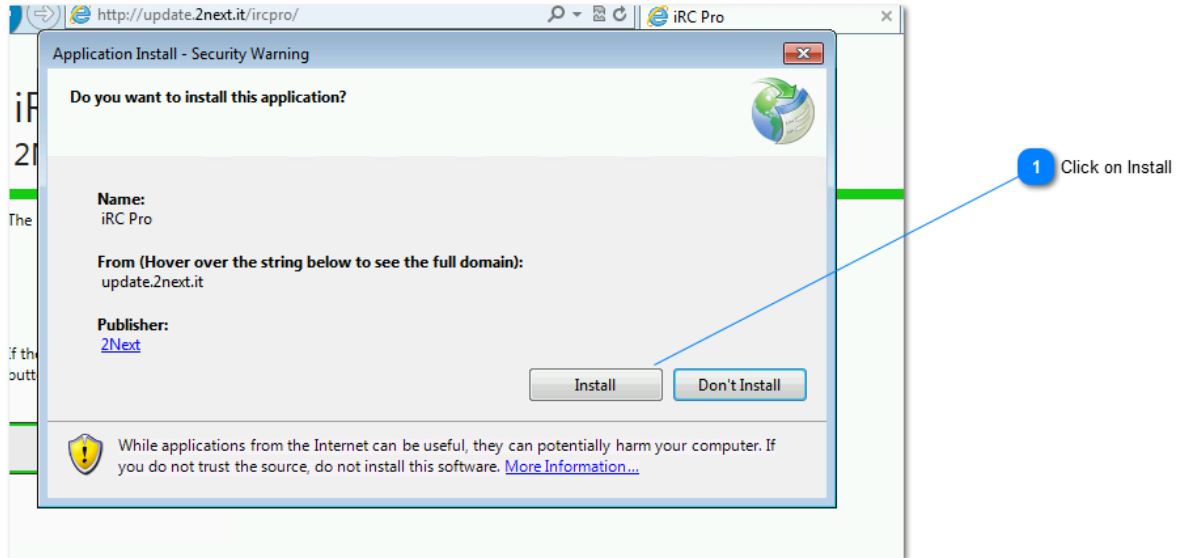


iRCPro needs some prerequisites to work. One of these is SqlServer 2008 Express. Click on **Accept** button to confirm SqlServer 2008 Express component setup.

Warning: After downloading, if you have Windows 7 or Windows server 2008 or later, you maybe be prompted to confirm User Access Control to allow Sqlserver 2008 setup changes.

step 6 - IrcPro setup

Click on Start button to run application.



When application is installed than go to [Licensing section](#)

1

Click on Install



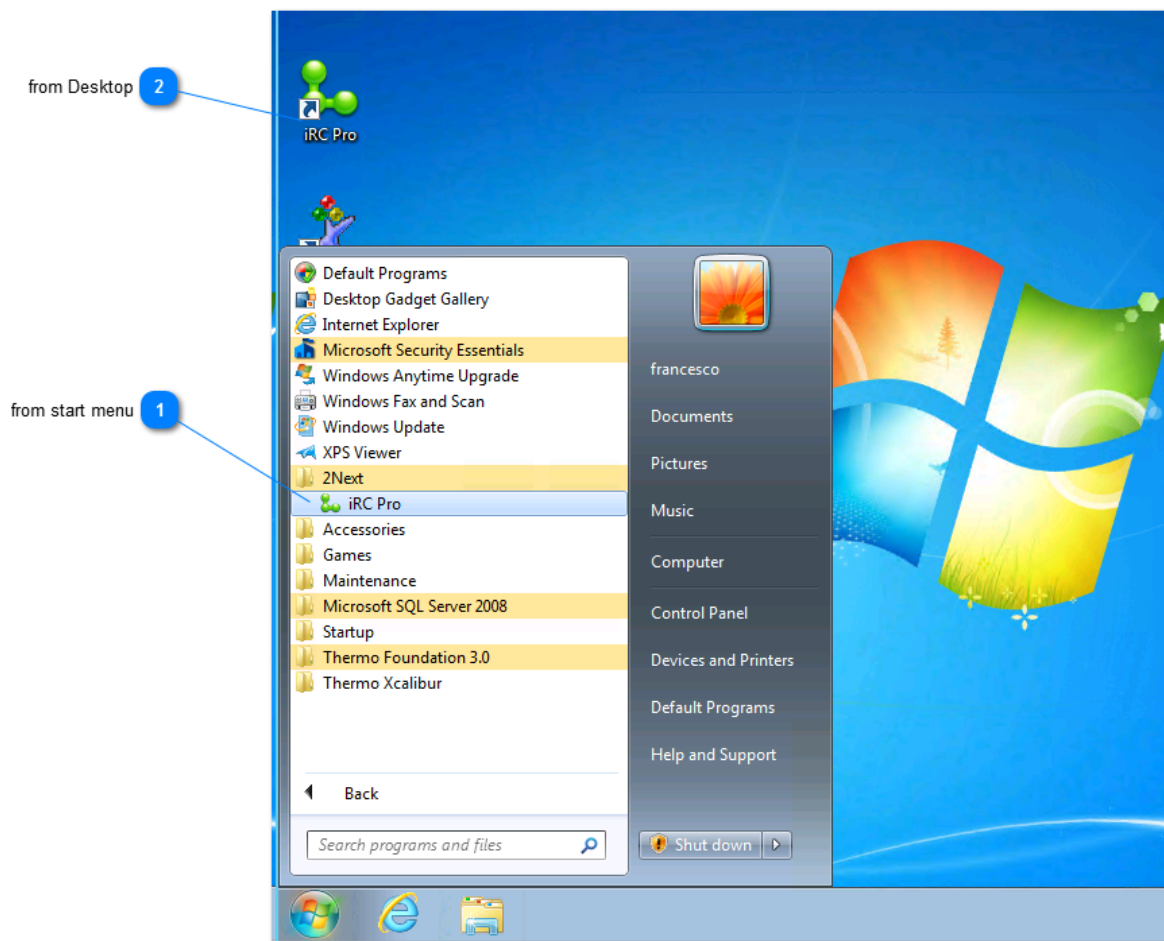
Click on **Install** button to confirm IRCPro application setup.

First run - Licensing

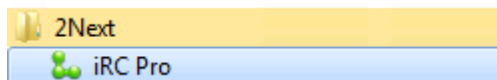
To use iRC Pro with full functionalities, you need to insert a valid license and activate it. Here below it is explained the procedure to install the software.

_ step 1 - Run iRCPro

If the application doesn't start automatically, run iRCPro from start menu.

**1**

from start menu

**2**

from Desktop



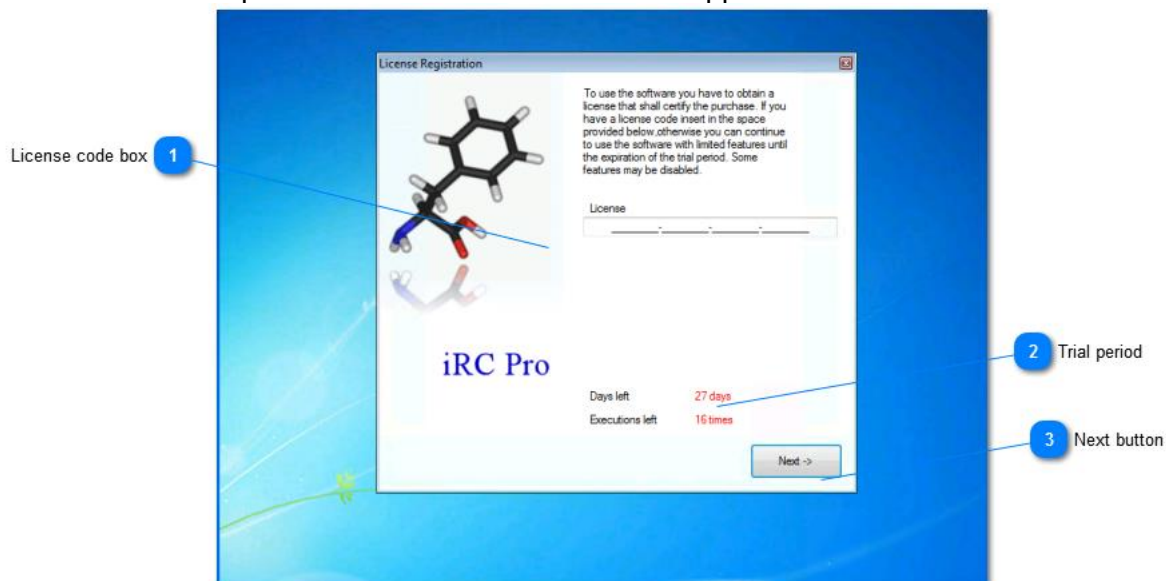
step 2 - Licensing

iRCPro needs a license to run with fully functionalities.

If you don't have a license code you can ask for one license with an email to info@2next.it. You have 30 days (or 20 executions) to obtain a license otherwise the application stop to run.

If you have a license code paste it into License box and press Next button.

If license code is invalid please contact **info@2next.it** for support.



1

License code box

License

Here you have to insert your license code.

2

Trial period

Days left 27 days
Executions left 16 times

Here you can check how times you can use iRCPro software until trial expiration.

3

Next button

Next ->

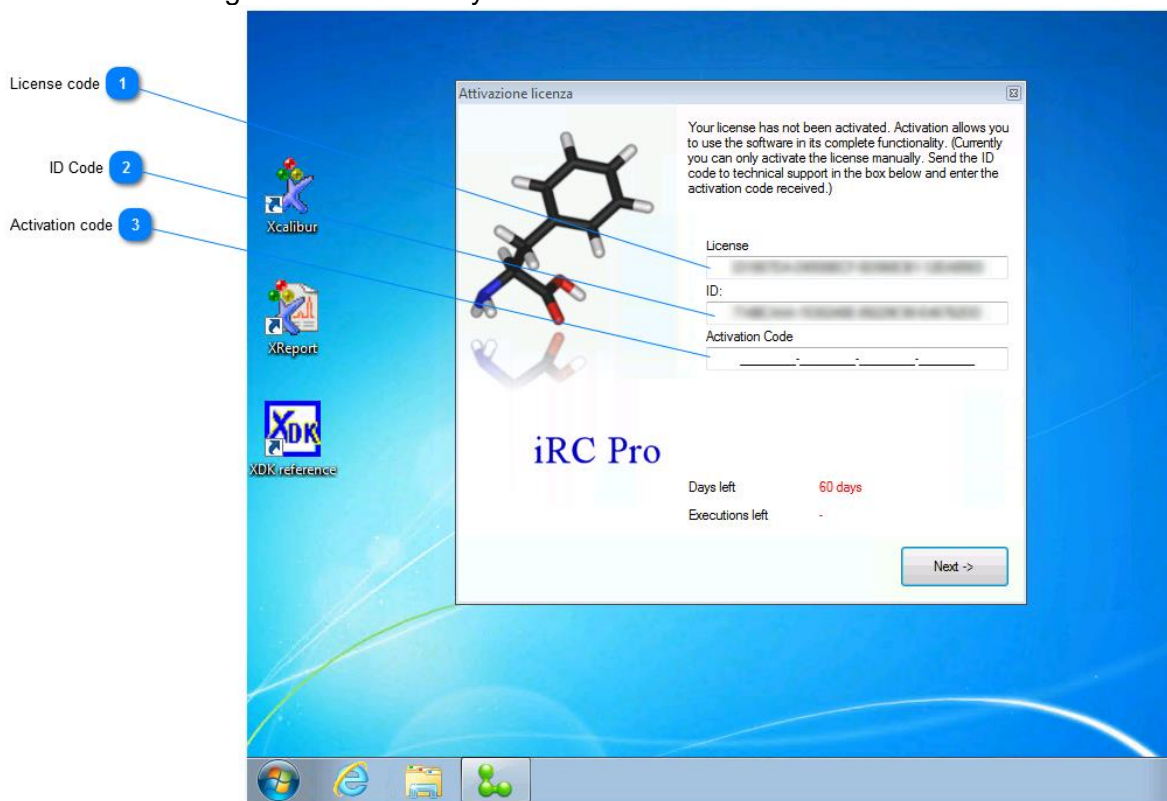
Click Next button to go forward.

step 3 - Activation

When you insert your license code you have 60 days to register and activate your license. During these 60 days you can use iRCPro with full functionalities. After 60 days the Demo mode starts.

To register your license you have to send to info@2next.it your ID code.

As reply to your ID code you obtain from 2NEXT support the Activation code. You have to paste it in the Activation box to register and activate your license.



1

License code

License

2

ID Code

ID:

This is the ID Code you have to submit to 2NEXT support to obtain Activation code.

3

Activation code

Activation Code

In reply to your ID code you obtain from 2NEXT support the Activation code. You have to

paste it in the Activation box to register your license.

First run - Create the database

Before using the software Pro iRC you need to create the database file. Otherwise you can import a previous backup file: to know how to do that go to Restore a Database chapter. These are the steps to create the database:

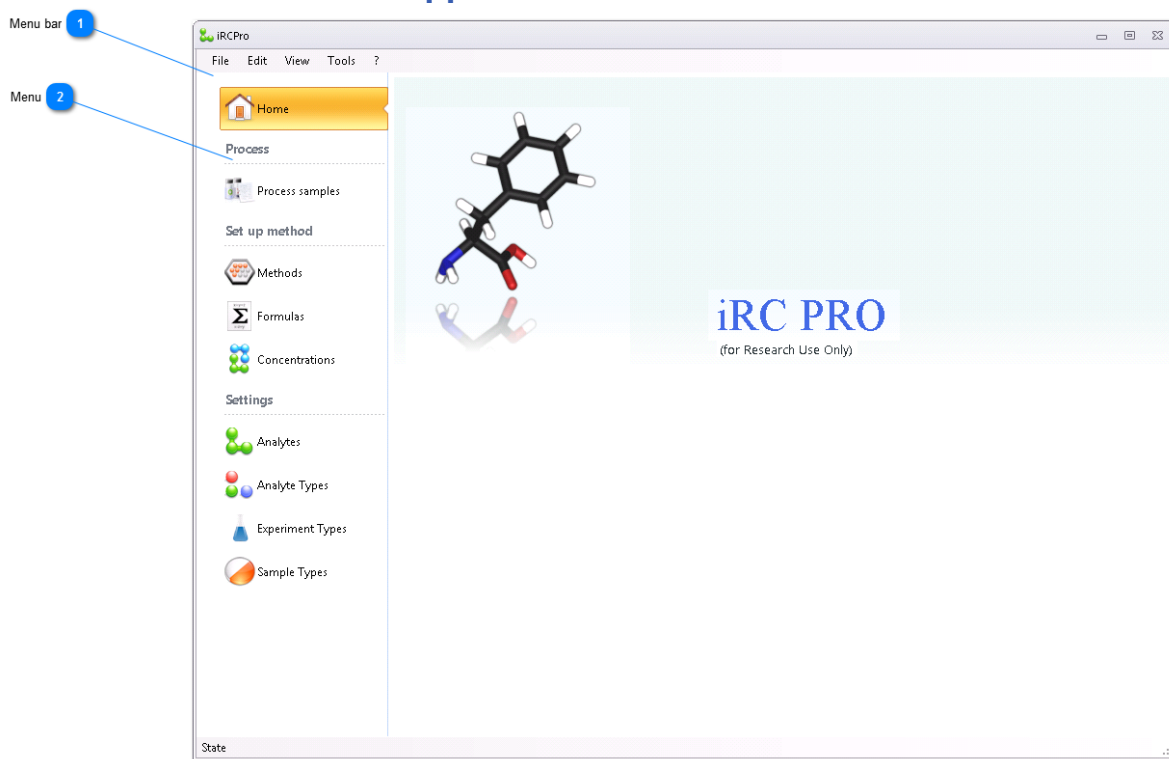
1. [Open options dialog](#)
2. Click on Create the database in the [General Tab](#)
3. Click Ok when the dialog "Creation successfully"
4. Click Ok then Click Ok again

Warning: We advise you to go to [Options section](#) and read how to configure your iRC Pro application based on the instruments and customer informations.

User Interface

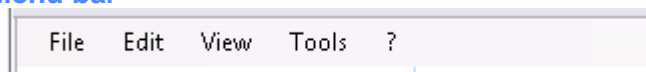
Read the topics bellow to learn how to use the iRC Pro software.

Application main window



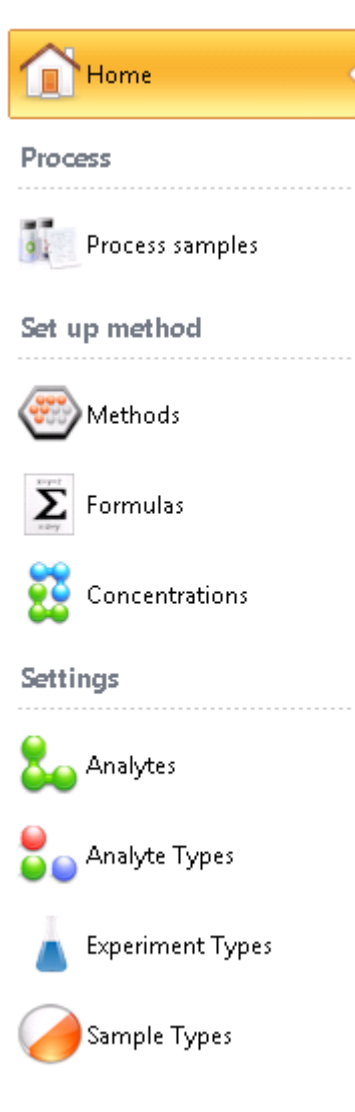
1

Menu bar



2

Menu

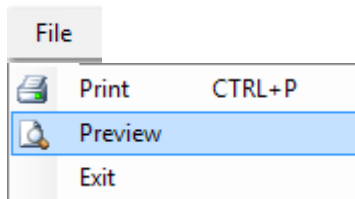


Menu bar



1

File



- **Print**

to Print the default report of the current window

- **Preview**

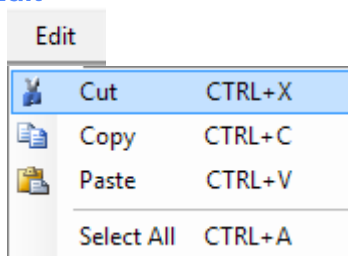
to show Preview dialog of the default report of current window

- **Exit**

To exit the application

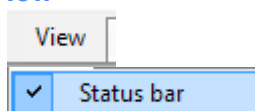
2

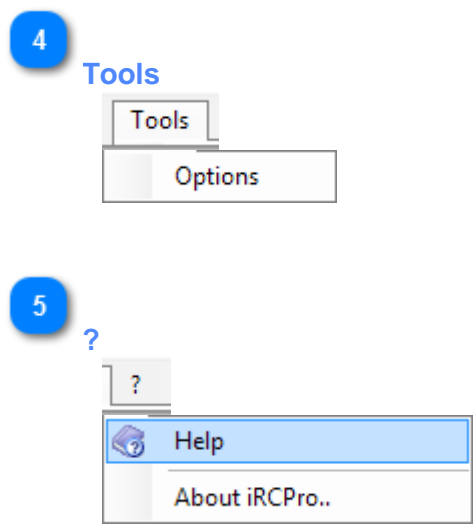
Edit



3

View



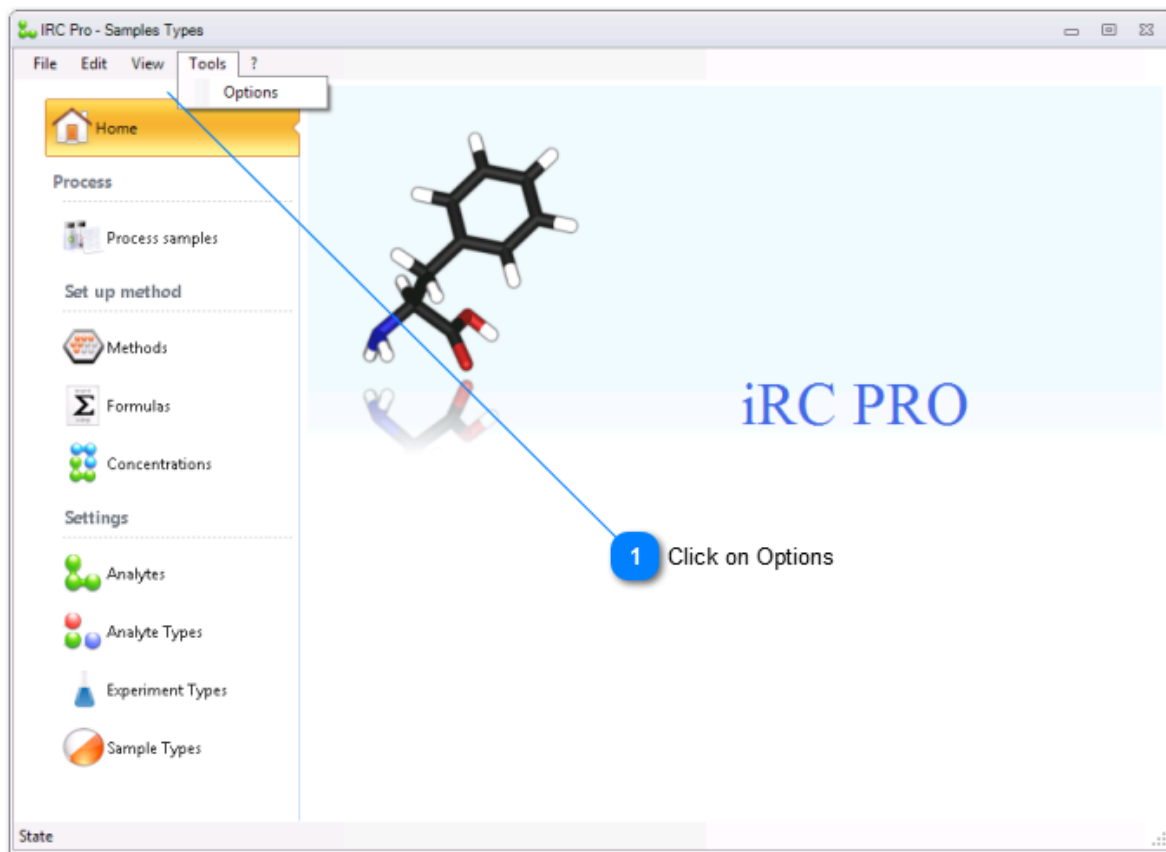


Options dialog

Read the topics bellow to learn how to configure the iRC Pro software.

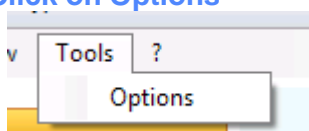
Ho to open Options dialog

Click On Tools from menu bar and so click on Options menu.

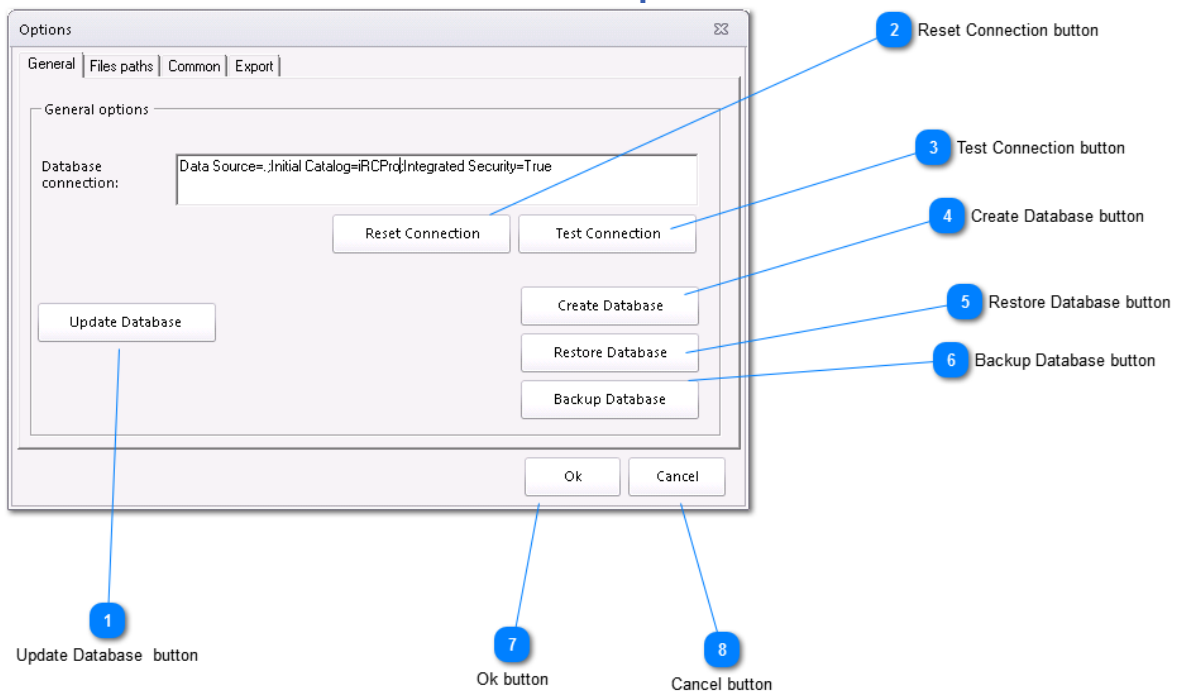


1

Click on Options

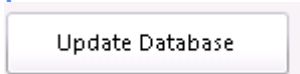


General options



1

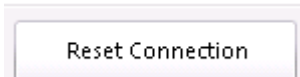
Update Database button



Update Database button verifies database schema and if necessary it updated the database. It's not necessary to do this manually because iRC Pro automatically verifies and updates database schema each time the application is launched. It's necessary to do manual update after a database is restored to avoid application restart.

2

Reset Connection button



Reset Connection button restores database connection to default.

3

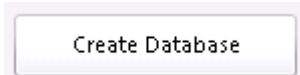
Test Connection button



Test connection and confirm you if the database status is ok.

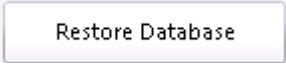
4

Create Database button



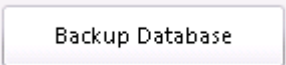
Create Database button can create a database. The name of database is the same contained in the Connection String. If a database with the same name already exists, an error occurs: in this case try using a different name.

5

Restore Database buttonA rectangular button with a light gray border and the text "Restore Database" centered inside.

Restore Database button asks for a database backup file and restores it. It can be used to restore the database after some wrong operation (e.g. some data deletion).

6

Backup Database buttonA rectangular button with a light gray border and the text "Backup Database" centered inside.

Backup Database button makes a database backup file. You can use the backup to do a copy of your data and store it in a safe place (e.g. external storage).

7

Ok buttonA rectangular button with a light gray border and the text "Ok" centered inside.

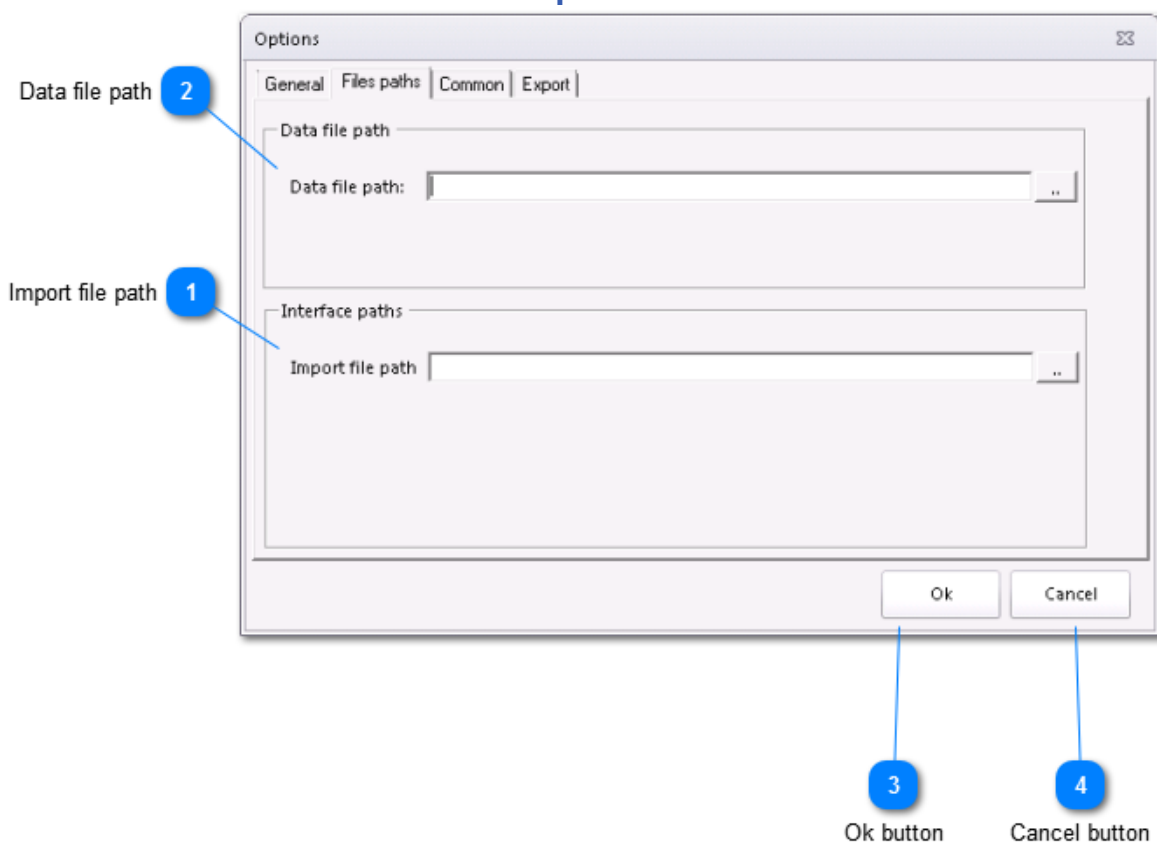
To close options dialog

8

Cancel buttonA rectangular button with a light gray border and the text "Cancel" centered inside.

to close options dialog without save settings.

File paths tab



1

Import file path

Import file path

Folder path is where to import the external results file

2

Data file path

Data file path:

Here you can insert the folder path where your sample raw files are placed by the software instruments.

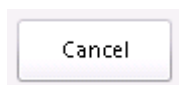
3

Ok button

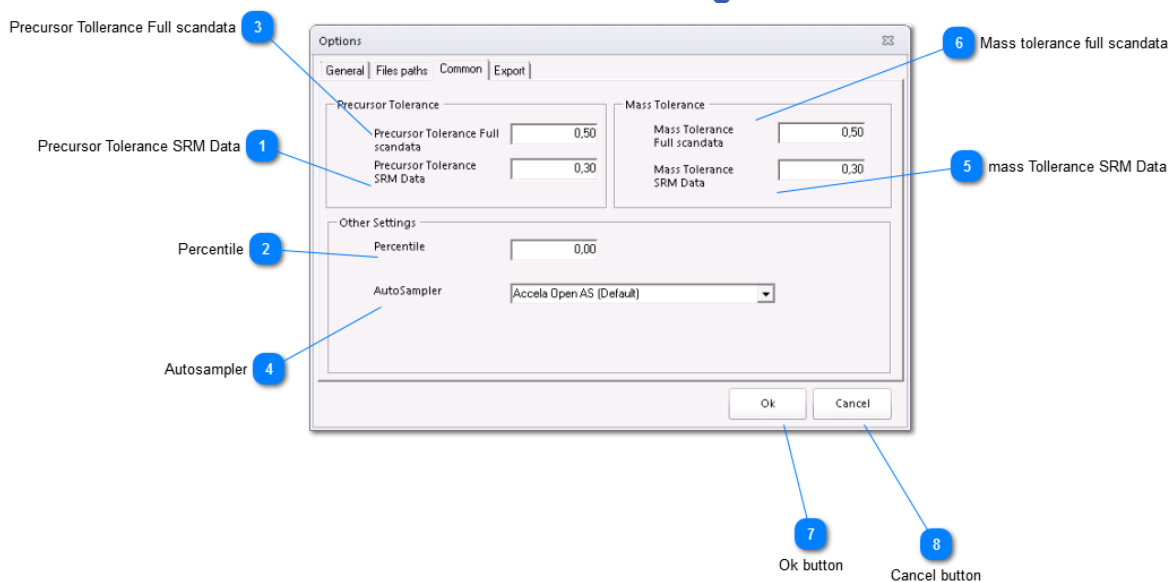
Ok

4

Cancel button



Common settings



1

Precursor Tolerance SRM Data

Precursor Tolerance SRM Data

2

Percentile

Percentile

3

Precursor Tolerance Full scandata

Precursor Tolerance Full scandata

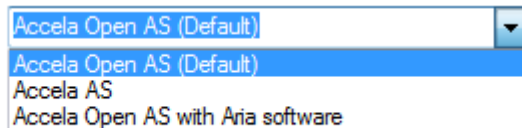
4

Autosampler

AutoSampler

iRC Pro supports these three type of auto-samplers:

AutoSampler



Accela Open AS (Default)
Accela Open AS (Default)
Accela AS
Accela Open AS with Aria software

5

mass Tollerance SRM Data

Mass Tolerance
SRM Data

6

Mass tolerance full scandata

Mass Tolerance
Full scandata

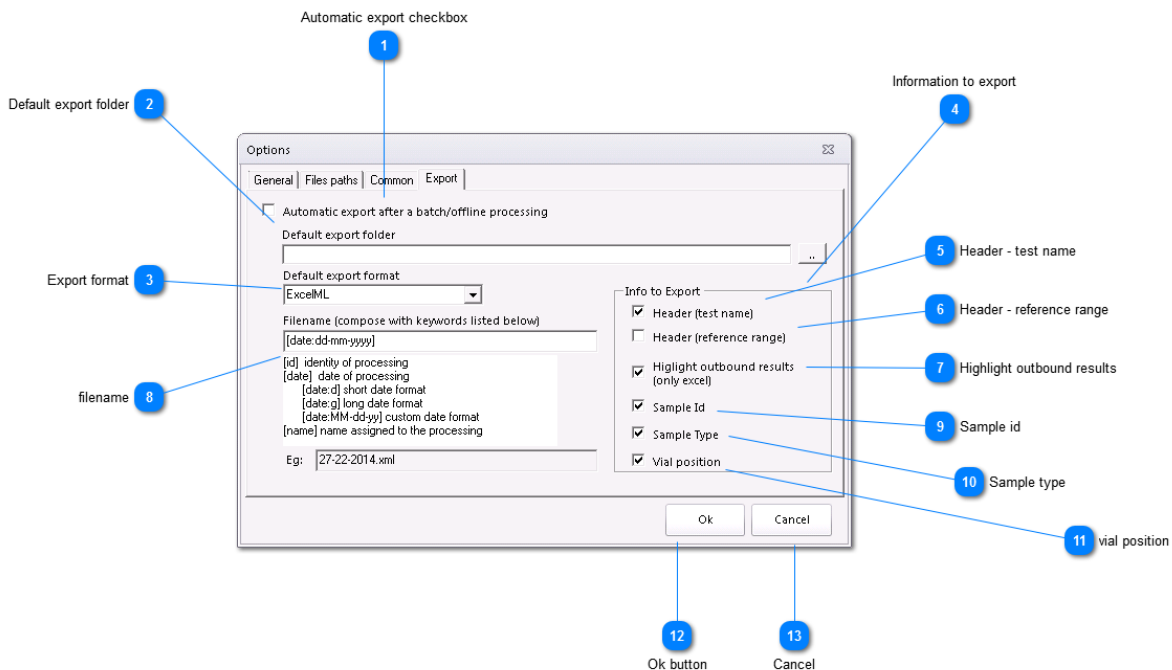
7

Ok button

8

Cancel button

Export Options dialog



1

Automatic export checkbox

☐ Automatic export after a batch/offline processing

If you check this option, IRcPro automatically creates an export file after each batch/offline processing. The file will be created in the export folder specified in the textbox below and using the selected format.

2

Default export folder

Default export folder

[Text box with browse button]

This is the folder path that iRCPro uses as default folder to export results file. You can change insert the full path manually or click on the nearby button to select the folder.

This path is used by IRcPro to create the result files automatically after each batch/offline processing (see above)

When you export file manually IRcPro starts from this folder path but you can change before confirm.

3

Export format

Default export format

[Dropdown menu showing 'ExcelML']

This is the default export format.

You can choice from these five formats:

- Excel

the export file will be an Excel file (.xls). Use this option only if you have Microsoft Excel (2000 or an early release) installed on your pc, otherwise IRcPro will not be able to complete the export.

- **ExcelIML**

the export file will be an xml file that can be read from Microsoft Excel or Openoffice. Use this option if you don't have Microsoft Excel installed on you IRcPro pc.

- **PDF**

Using this format IRcPro will create a pdf file. You need a Pdf Reader to open the file (e.g. Adobe Reader)

- **HTML**

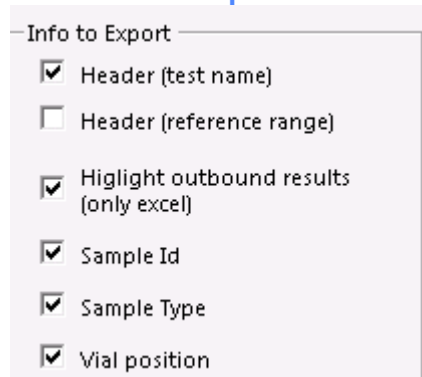
Using this format IRcPro will create an html file that you can open using your browser.

- **CSV text file**

Using this format IRcPro will create a csv text file (comma-separated values). You can use this format to export results to other software.

4

Information to export

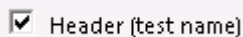


The screenshot shows a dialog box titled "Info to Export" with a list of options, each with a checkbox. The options are: "Header (test name)" (checked), "Header (reference range)" (unchecked), "Highlight outbound results (only excel)" (checked), "Sample Id" (checked), "Sample Type" (checked), and "Vial position" (checked).

You can choice which information export in the file. See each option below.

5

Header - test name

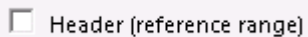


The screenshot shows a single checkbox labeled "Header (test name)" which is checked.

Check this option if you want IRcPro will create a header row.

6

Header - reference range

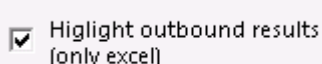


The screenshot shows a single checkbox labeled "Header (reference range)" which is unchecked.

Using this option IRcPro will create two rows with reference range for each test.

7

Highlight outbound results



The screenshot shows a single checkbox labeled "Highlight outbound results (only excel)" which is checked.

Using this option IRcPro will highlight any value that is outside of the reference range using a red background color.

This option is available only if you choice the excel format.

8

filename

Filename (compose with keywords listed below)

[date:dd-mm-yyyy]

[id] identity of processing
[date] date of processing
[date:d] short date format
[date:g] long date format
[date:MM-dd-yy] custom date format
[name] name assigned to the processing

Eg: 27-22-2014.xml

You can specify a format for the file name to use for export file.

You can combine the information listed above to generate your custom file name.

In the Example text box you can preview which will be the filename based on your choices.

9

Sample id

☒ Sample Id

Using this option IRcPro will export in the file the id of each sample.

10

Sample type

☒ Sample Type

Using this option IRcPro will export in the file the sample type of each sample.

11

vial position

☒ Vial position

Using this option IRcPro will export in the file the position in the tray of each sample.

12

Ok button

Ok

Click Ok to confirm

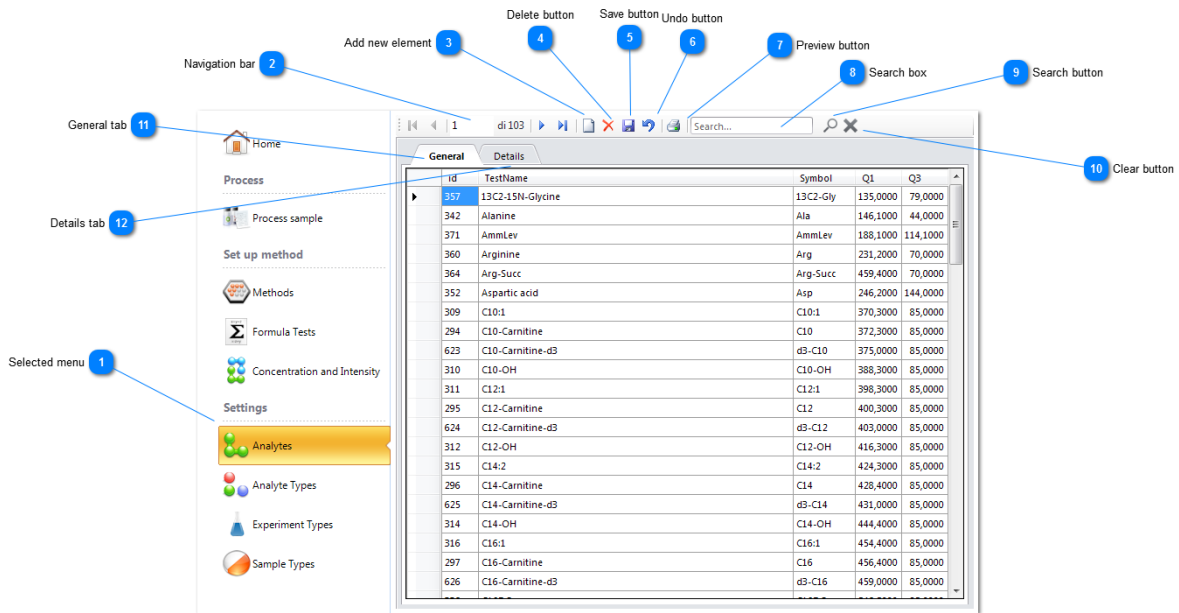
13

Cancel

Ok Cancel

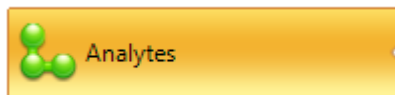
Click Cancel to close the window and discard changes.

Data entry window



1

Selected menu



It is highlighted when you choose a menu.

2

Navigation bar



You can move the selected item forward, backward using this button. You can also go to first or last item of the list.

The counter shows the position of current item and the number of items in the list.

The position is related by the sort order used by default. In the example, the items are sorted by Name.

3

Add new element



Click here to add a new element.

4

Delete button



Click here to delete the selected item. A dialog window asks you to confirm.

Warning: a deleted item cannot be restored.

5

Save button



Click here to save changes to database. The main title bar tells you if there are some unsaved changes.

If you move to other window a dialog window asks you to save changes data.

6

Undo button



Click here to remove changes and return to your previous saved data.

7

Preview button



Click here to show a preview of the related report.

8

Search box



Insert here a search text. Depend of type of data, the search text can be used to filter data by name, description or other information.

If you enter 3 or less characters will show only items whose name or description **begins** with those characters.

If you enter more than 3 characters will show all items whose name or description **contains** the search test.

9

Search button



Search button performs filtering by inserted text.

10

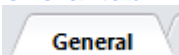
Clear button



Clear search text box and show no filtered data.

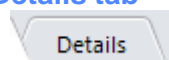
11

General tab



Go to General tab. In this tab data items are shown in a grid. Only main information is shown.

12

Details tab

This shows Details tab. In the details all data of the selected item are shown.

General Tab

2
Selected item

General		Details			
	id	TestName	Symbol	Q1	Q3
▶	357	13C2-15N-Glycine	13C2-Gly	135,0000	79,0000
	342	Alanine	Ala	146,1000	44,0000
	371	AmmLev	AmmLev	188,1000	114,1000
	360	Arginine	Arg	231,2000	70,0000
	364	Arg-Succ	Arg-Succ	459,4000	70,0000
	352	Aspartic acid	Asp	246,2000	144,0000
	309	C10:1	C10:1	370,3000	85,0000
	294	C10-Carnitine	C10	372,3000	85,0000
	623	C10-Carnitine-d3	d3-C10	375,0000	85,0000
	310	C10-OH	C10-OH	388,3000	85,0000
	311	C12:1	C12:1	398,3000	85,0000
	295	C12-Carnitine	C12	400,3000	85,0000
	624	C12-Carnitine-d3	d3-C12	403,0000	85,0000
	312	C12-OH	C12-OH	416,3000	85,0000
	315	C14:2	C14:2	424,3000	85,0000
	296	C14-Carnitine	C14	428,4000	85,0000
	625	C14-Carnitine-d3	d3-C14	431,0000	85,0000
	314	C14-OH	C14-OH	444,4000	85,0000
	316	C16:1	C16:1	454,4000	85,0000
	297	C16-Carnitine	C16	456,4000	85,0000
	626	C16-Carnitine-d3	d3-C16	459,0000	85,0000

1
Sort by column

1

Sort by column

TestName

Clicking on the column header, data items will be sorted. First click order data by ascending order; second click order data by descending order.
Column width can be resized manually. Also column header position can be moved.

2

Selected item

▶	357	13C2-15N-Glycine	13C2-Gly	135,0000	79,0000
---	-----	------------------	----------	----------	---------

This is the selected item.

Details Tab

The screenshot shows the 'Details Tab' of a software interface. It contains the following fields and their validation status:

- id:** 0
- Name:** [Empty text box] - Required (red triangle icon)
- Symbol:** [Empty text box]
- Analyte Type:** [Empty dropdown menu] - Validation error (red triangle icon)
- Experiment Type:** [Empty dropdown menu] - Validation error (red triangle icon)
- Q1:** [Empty text box]
- Q3:** [Empty text box]

Annotations in the image:

- 1 Required information:** Points to the 'Name' field.
- 2 Validation error:** Points to the 'Analyte Type' and 'Experiment Type' fields.

1

Required information



This red triangle means that the field is required. If you leave it blank a validation error occurs.

2

Validation error



If saving data, there is any error will be shown a flashing icon. In the example no data has been inserted in the required filed.

Until all validation exceptions are resolved you cannot save data.

Settings windows

Before create your method you have to create types and analytes.

Sample types windows

Sample Type

Unknown

QC HighLevel

QC LowLevel

Blank

Sample Type: Unknown

External code: Unknown

1 Name

2 External code

1

Name

Sample Type: Unknown

Name of Sample Type (Required)

2

External code

External code: Unknown

Here you should enter the code of the Sample type used in instruments software (e.g. Xcalibur)

Experiment types

Experiment Type

SRM

NLR

PS

rtrtrt

Experiment Type: SRM

Description: SRM

Single Reaction Monitoring: MS2 Scan

External code

Warning! Experiment types are special information linked closely to instrument software. Experiment types are automatically created with the database. You shouldn't add or delete experiment types. The only information you could have need to edit is External code to match the related code in instrument software.

1

Name

Experiment Type: SRM

Name of experiment type (required)

2

Description

Description: SRM

Description of Experiment type

3

External code

Single Reaction
Monitoring: MS2 Scan

Here you should enter the code of the Sample type used in instruments software (e.g. Xcalibur)

Analyte types windows

The screenshot shows the 'Analyte types' window. On the left, there is a list of analyte types with 'AA' selected. On the right, the details for 'AA' are shown. The 'Analyte Type' field contains 'AA' and is labeled '1 Name'. The 'note' field is empty and is labeled '2 Note'.

1

Name

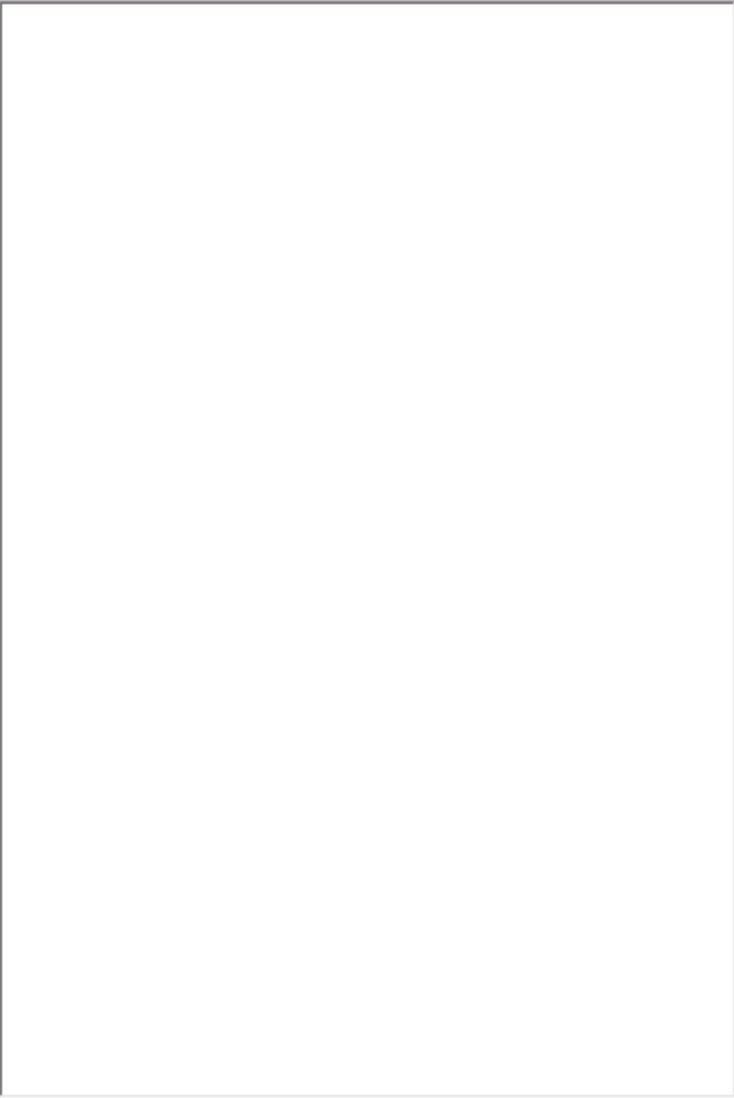
Analyte Type: AA

Name of Sample Type (Required)

2

Note

note:

A large, empty rectangular box with a thin black border, intended for users to insert notes and comments. It occupies most of the width and height of the 'note:' section.

Here you can insert notes and comments.

Analytes window

The screenshot shows the 'Analytes window' with the 'Details' tab selected. The window contains the following fields and values:

- Name:** Xe
- Symbol:** Xe
- Analyte Type:** AA
- Experiment Type:** NL
- Q1:** 188.2
- Q2:** 102.1

Numbered callouts (1-6) point to the following fields:

- 1: Name of Analyte (points to the Name field)
- 2: Symbol (points to the Symbol field)
- 3: Analyte type (points to the Analyte Type dropdown)
- 4: Experiment type (points to the Experiment Type dropdown)
- 5: Q1 (points to the Q1 input field)
- 6: Q2 (points to the Q2 input field)

1

Name of Analyte

Name:

This is the name of the analyte (you can use a full name)

2

Symbol

Symbol:

The symbol of the Analyte. If the analyte has a symbol it is used to name it instead of the analyte name.

3

Analyte type

Analyte Type:

the type of Analyte. You can modify the existing types in the [Analyte type window](#)

4

Experiment type

Experiment Type:

the Experiment type of the Analyte. You can modify the existing types in the [Experiment type window](#)

5

Q1

Q1:

6

Q2

Q3:

Set up methods windows

Now you have to create your analysis method. A method is a group of test.

Concentration and Intensity

General **Details**

Name: (1)

Symbol: (2)

Analyte: (5)

IS: (6)

Analyte Type: AA (3)

Experiment Type: SRM (4)

IS Concentration: (7)

RR Factor: (8)

Reference Ranges (9)

Sample Type	LCL	UCL
Unknown	100,000	1.500,000
QC_L	189,000	633,000
QC_H	330,000	1.174,000

1

Name

Concentration :

Name of Test (Required)

2

Symbol

Symbol:

The symbol of the test. If the test has a symbol it is used in place of the fullname.

3

Analyte type

Analyte Type: AA

Analyte type

This information is read only: IrcPro determine the Analyte type from the Analyte and the IS definition.

Warning: you cannot specify an Analyte and an IS of two different types. Even the Experiment type must be equal. A message will inform you if you have wrong and invite you to correct your choices before confirm them.

4

Experiment type

Experiment Type: SRM

Experiment Type

This information is read only: IrcPro determines the Analyte type from the Analyte and the IS

definition.

Warning: you cannot specify an Analyte and an IS of two different types. Even the Experiment type must be equal. A message will inform you if you have wrong and invite you to correct your choices before confirm them.

5

Analyte

Analyte:

6

Internal Standard

IS:

7

IS concentration

IS Concentration:

8

RR Factor

RR Factor:

Concentration ratio

The concentration calculation is based on this formula:

$$C = \frac{\text{Analyte}}{\text{IS}} C_{IS} R_r$$

where

Analyte is absolute value of the Analyte

IS is the absolute value of the IS

C_{IS} is the IS concentration

R_r is the RR Factor

9

Reference ranges

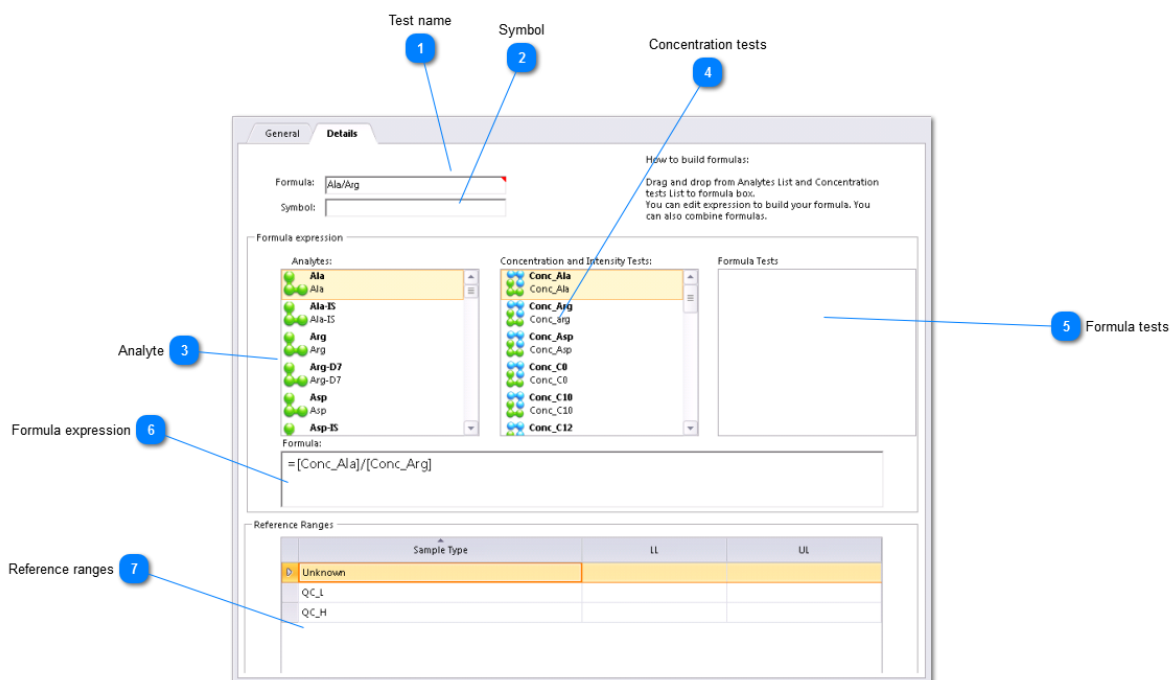
	Sample Type	LCL	UCL
	Unknown	100,000	1.500,000
▶	QC_L	189,000	633,000
	QC_H	330,000	1.174,000

Here you can specify the reference range for each sample type

LCL is Low Concentration Level and if it's empty IRCPro assumes that there not a low level.
UCL is High concentration Level and if it's empty IRCPro assumes that there not a high level.
For example, if the range concentration values are 100 and 180, IrcPro highlight any values above 180 or below 100 and it assume that any values between 100 and 180 are negative.

Warning: you cannot add a new sample type here. To do this, you have to add in the Sample Type window; automatically IrcPro will create for you a reference range for the new sample type without LL and UL values.

Formula tests



1

Test name

Formula: Ala/Arg

Name of Test (Required)

2

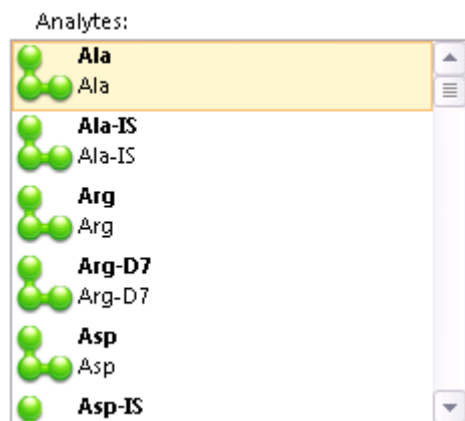
Symbol

Symbol:

The symbol of the test. If the test has a symbol it is used in place of the fullname.

3

Analyte

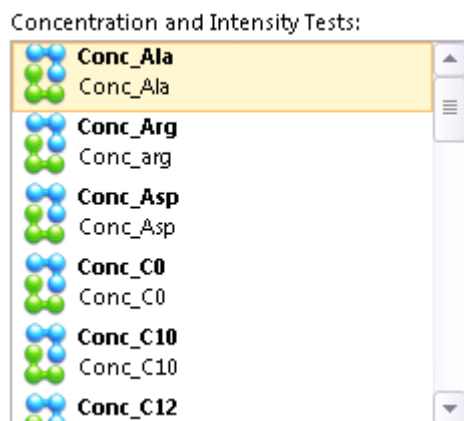


You can combine Analyte, Concentration or Formulas in your mathematical expression.

To use an Analyte simply drag and drop it in the Formula textbox and edit it to complete the desired expression.

4

Concentration tests

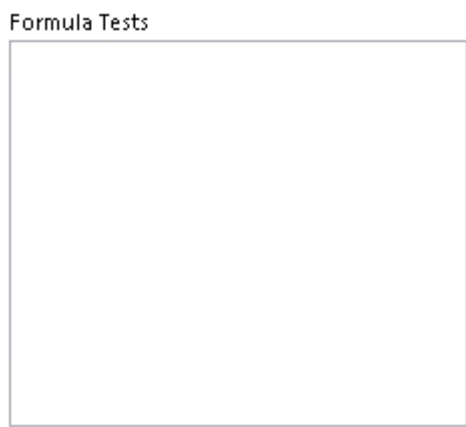


You can combine Analyte, Concentration or Formulas in your mathematical expression. Above there is the list of concentrations tests

To use a Concentration simply drag and drop it in the Formula textbox and edit it to complete the desired expression.

5

Formula tests



You can combine Analyte, Concentration or Formulas in your mathematical expression. Above there is the list of formula tests

To use a Formula simply drag and drop it in the Formula textbox and edit it to complete the desired expression.

Warning: it's not supported to combine a formula within another formula and to create a recursive expression.

6

Formula expression

Formula:

```
= [Conc_A|a]/[Conc_Arg]
```

The formula expression. To build it drag & drop Analyte, Concentrations or other Formula in the Formula box. You can select and delete a test using button.

You can use mathematic operands (+,-,/,*), brackets ("(",")"), functions (**sqr** for square root,**abs** for absolute,etc) according to VBA (Visual Basic for Application) language (used for example by Microsoft Access).

7

Reference ranges

	Sample Type	LL	UL
▶	Unknown		
	QC_L		
	QC_H		

Here you can specify the reference range for each sample type

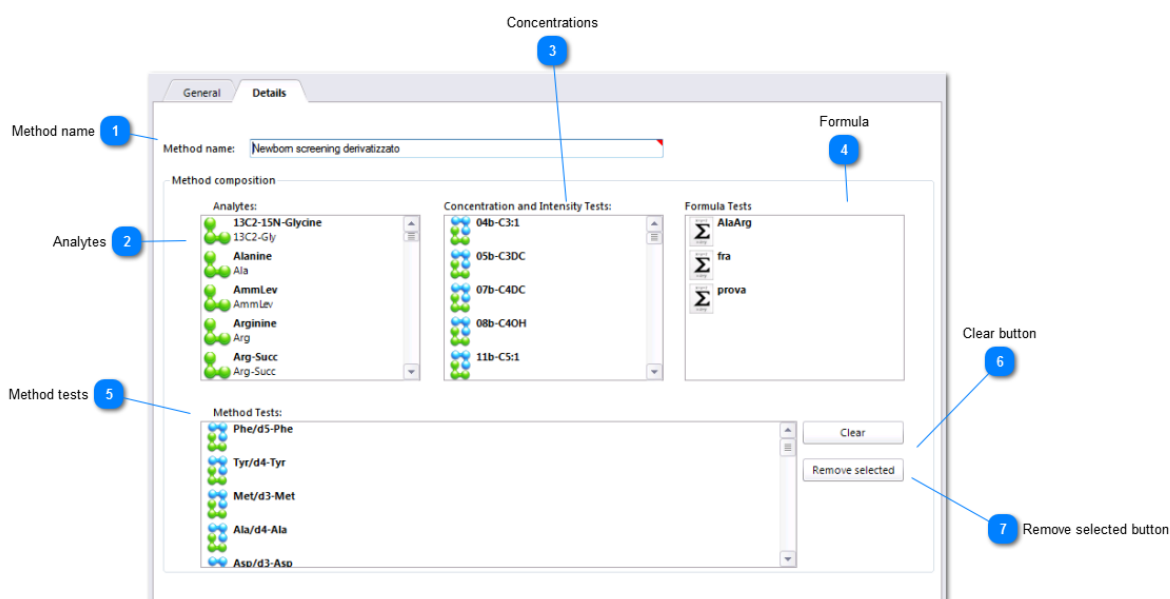
LCL is Low Concentration Level and if it's empty IRCPro assumes that there not a low level.

UCL is High concentration Level and if it's empty IRCPro assumes that there not a high level.

For example, if the range concentration values are 100 and 180, IrcPro highlight any values above 180 or below 100 and it assume that any values between 100 and 180 are negative.

Warning: you can add a new sample type here. If you need to do it, you have to add in the Sample Type window. Automatically IrcPro create for you a reference range for the new sample type without LL and UL values.

Method



1

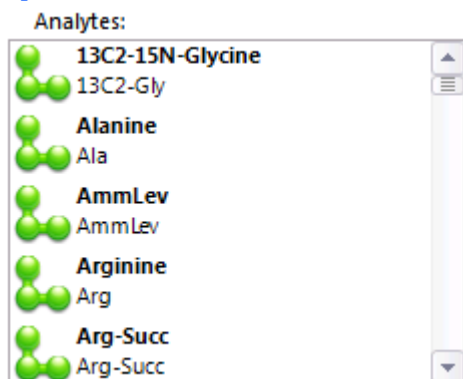
Method name

Method name:

Name of Method (Required)

2

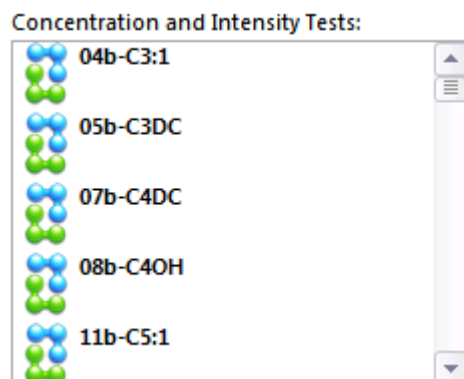
Analytes



List of Analyte

3

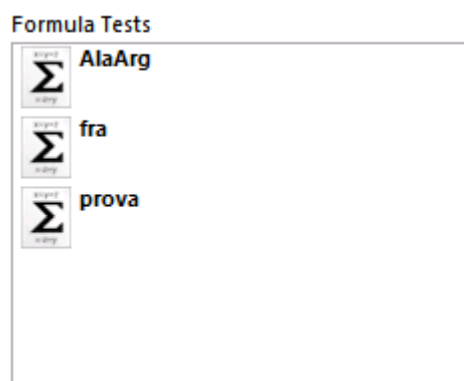
Concentrations



List of Concentrations

4

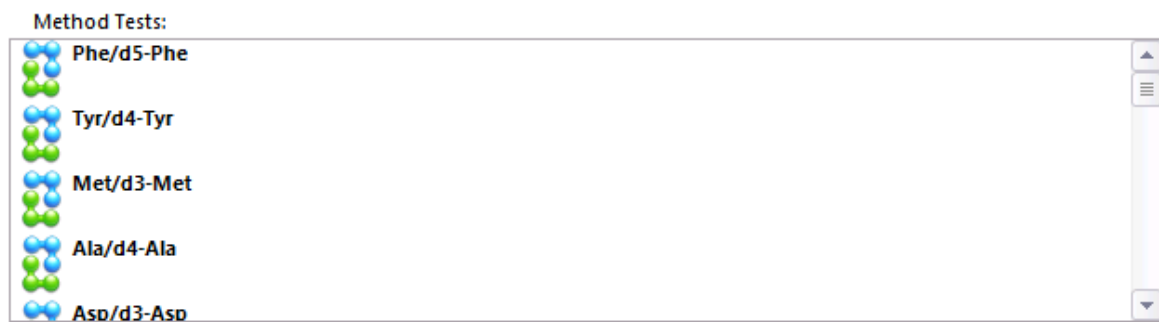
Formula



List of Formulas

5

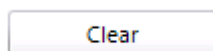
Method tests



List of selected tests. To build your method select and drag concentration tests, other formula tests or analytes.

6

Clear button



Remove all tests from this method

7

Remove selected button

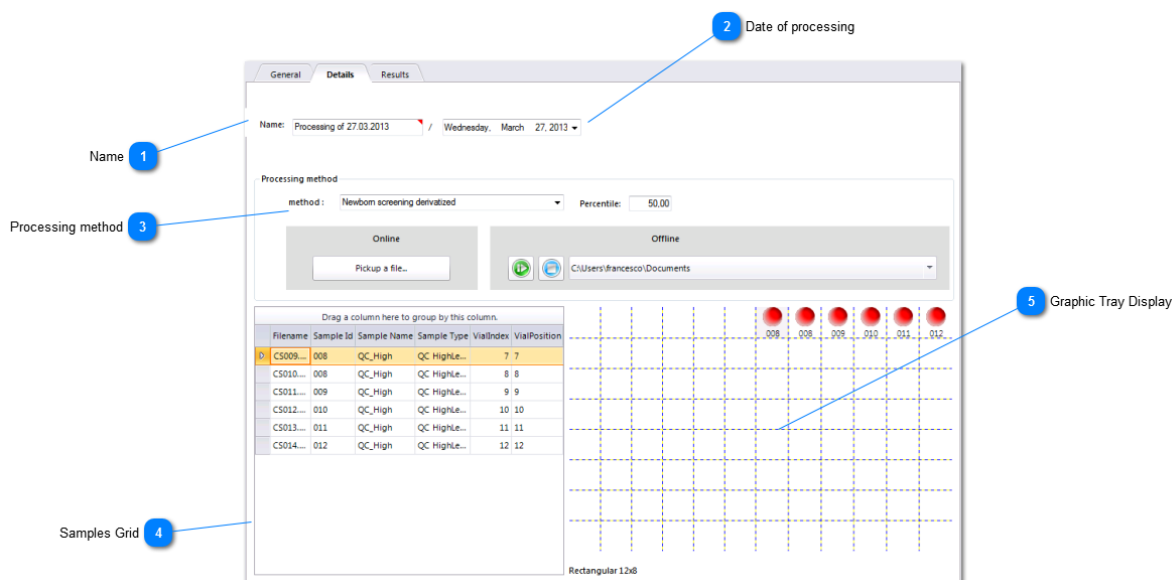
Remove selected

Remove only selected test

Processing window

Read the topics bellow to learn how to process data and produce results.

Details



1

Name

Name: Processing of 27.03.2013

When you start a new processing, the Name is automatically set to "Processing mm/dd/yyyy"

2

Date of processing

Wednesday, March 27, 2013

When you start a new processing, the date is automatically set to the current date.

3

Processing method

Processing method

method: Newborn screening derivatized Percentile: 50.00

Online

Pickup a file...

Offline

C:\Users\francesco\Documents

Here you can import and process samples. More details in [Processing section](#)

4

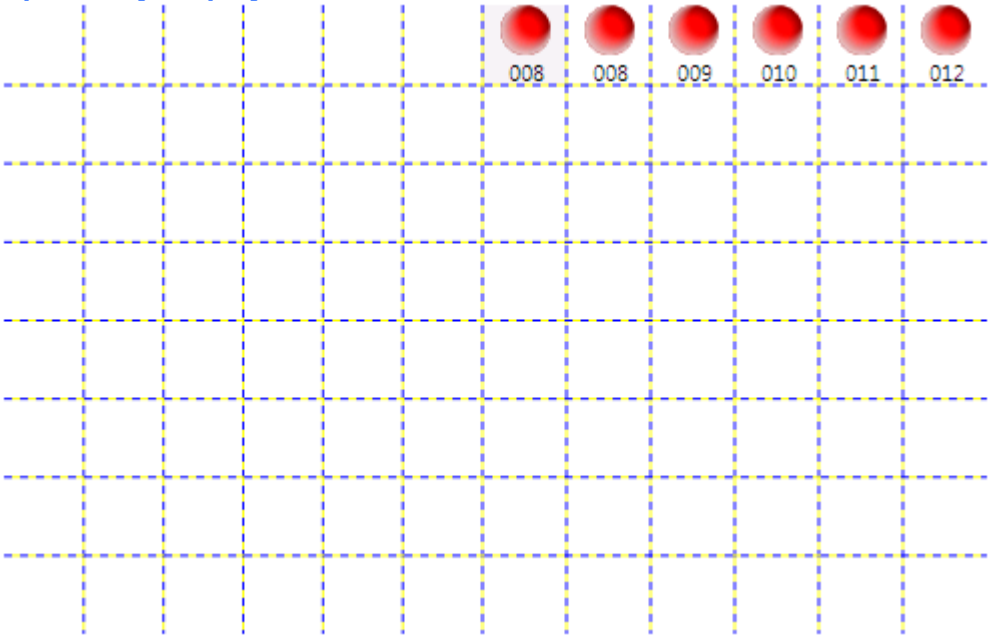
Samples Grid

Drag a column here to group by this column.						
	Filename	Sample Id	Sample Name	Sample Type	VialIndex	VialPosition
▶	CS009....	008	QC_High	QC HighLe...	7	7
	CS010....	008	QC_High	QC HighLe...	8	8
	CS011....	009	QC_High	QC HighLe...	9	9
	CS012....	010	QC_High	QC HighLe...	10	10
	CS013....	011	QC_High	QC HighLe...	11	11
	CS014....	012	QC_High	QC HighLe...	12	12

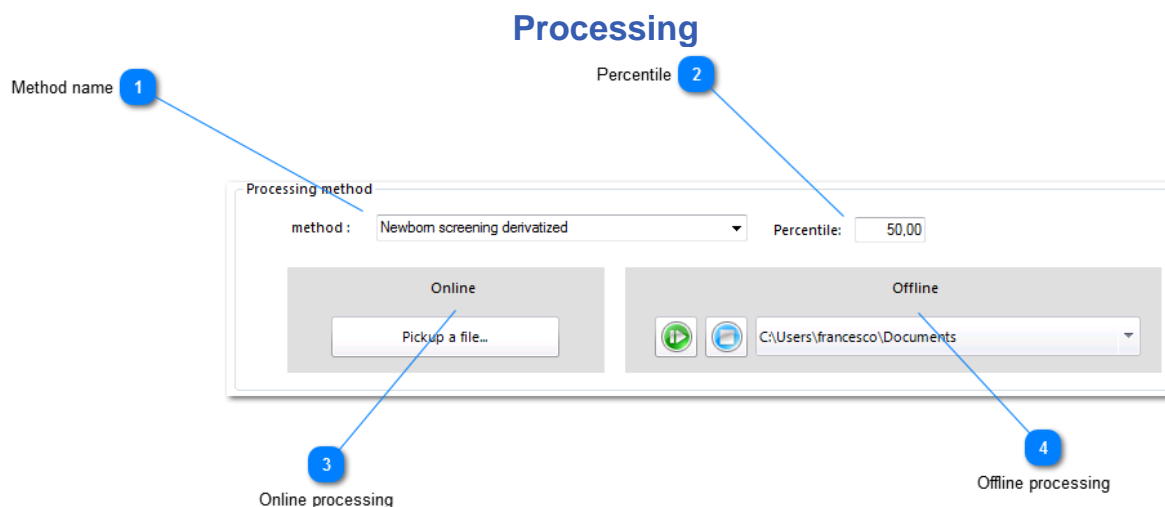
Each processed sample is shown in the Samples Grid as Sample ID, Sample Name and Type and Vial position and Tray number.

5

Graphic Tray Display



The processed samples of the tray are displayed in this Grid. Below the red circle is the sample id.



To process one or more sample you should :

1. choose a method
2. choose a processing method: Online or Offline

1

Method name

Newbom screening derivatized

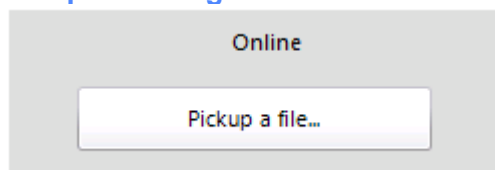
2

Percentile

50,00

3

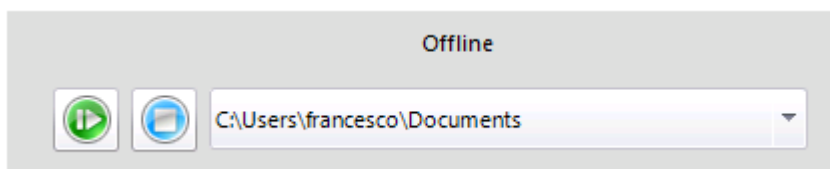
Online processing



See [Online processing section](#)

4

Offline processing

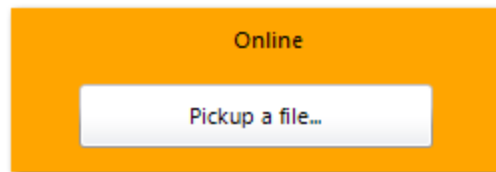


See [Offline processing section](#)

Offline method

Offline method processes a sample manually. Can be processed only one file at a time
To start offline processing you have to :

1. click on Online button



2. choose a raw file or txt file
3. when the file is processed it will be show in the Sample Grid and Results Grid.

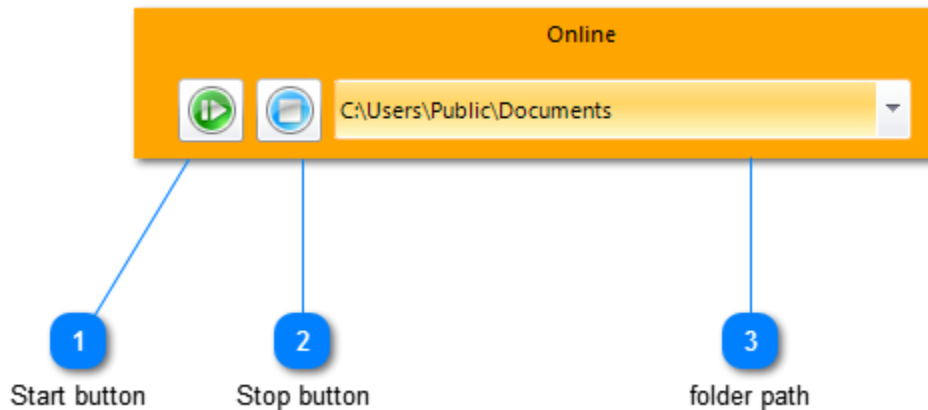
Online method

Online processing method permits to import and process multiple samples file automatically. It scans a folder and when a new file (raw or txt file) appears, it's automatically imported and processed.

To start online processing you have to:

1. choose folder path

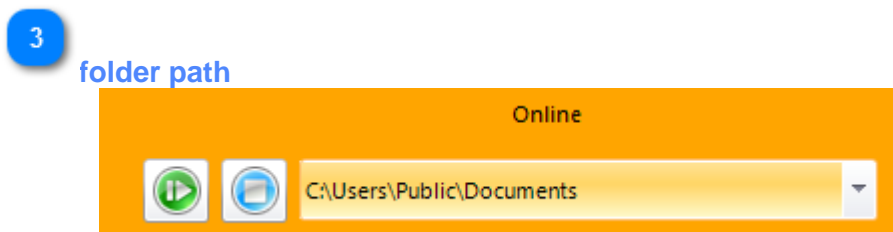
(by default the folder path is the same of import files path in the [Option dialog](#). You can change it clicking on folder box or by the Options dialog.)



2. Click on Start button

(background activities are reported in the status bar)

3. Click on Stop button to end processing



By default the folder path is the same of import files path in the [Option dialog](#). You can change it clicking on folder box or by the Options dialog.

Results window

Sample types

Results tab

Grouping area

Results value

GeneralDetailsResults

QC_H

QC_L

Drag a column here to group by this column.

Sample Id	Vial position	Conc_Ala	Conc_Arg	Conc_Asp	Conc_C0	Conc_C10	Conc_C12	Conc_C14	Conc_C16	Conc_C18	Conc_C2
UCL		1.174,0000	248,0000	617,0000	149,0000	3,5800	3,1800	3,4500	19,8000	13,7000	104,0000
LCL		330,0000	86,0000	305,0000	67,5000	1,3600	1,5500	1,4600	8,7300	5,0700	46,7000
QC_H	CStk1-01:4	779,3227	178,8338	632,2812	121,4808	2,4513	2,1939	2,0534	13,5731	8,4220	68,6078
QC_H	CStk1-01:4	849,5752	188,4895	601,5120	114,9927	2,5418	2,0771	1,8936	13,9663	8,8243	59,0683
QC_H	CStk1-01:4	894,4000	175,0132	684,3232	134,5123	2,4848	2,2135	1,9288	13,7737	9,0575	67,7854
QC_H	CStk1-01:4	981,0536	171,2677	639,7907	117,5036	2,4281	2,2536	1,9719	13,9197	8,9473	67,4095

Export to Excel

Export to ExcelML

Export to plain text

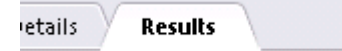
Export to Excel

Export to ExcelML

Export to text file

1

Results tab



You can display the Results windows clicking on the Results tab button.

2

Sample types



3

Grouping area

Drag a column here to group by this column.

Here you can drag and drop a column to group data. To remove grouping drag and drop the column outside the grid

4

Results value

Sample Id	Vial position	Conc_Ala	Conc_Arg	Conc_Asp	Conc_C0	Conc_C10	Conc_C12	Conc_C14	Conc_C16	Conc_C18	Conc_C2
UCL		1.174,0000	248,0000	617,0000	149,0000	3,5800	3,1800	3,4500	19,8000	13,7000	104,0000
LCL		330,0000	86,0000	305,0000	67,5000	1,3600	1,5500	1,4600	8,7300	5,0700	46,7000
QC_H	CStk1-01:4	779,3227	178,8338	632,2812	121,4808	2,4513	2,1939	2,0534	13,5731	8,4220	68,6078
QC_H	CStk1-01:4	849,5752	188,4895	601,5120	114,9927	2,5418	2,0771	1,8936	13,9663	8,8243	59,0683
QC_H	CStk1-01:4	894,4000	175,0132	684,3232	134,5123	2,4848	2,2135	1,9288	13,7737	9,0575	67,7854
▶ QC_H	CStk1-01:4	981,0536	171,2677	639,7907	117,5036	2,4281	2,2536	1,9719	13,9197	8,9473	67,4095

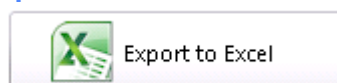
In the Results Grid you can see all samples of the selected sample type and the values for each tests contained in the method you used to process data.

You can sort the values by clicking on a column header. Using right mouse click, you can access to an advanced menu that help you to choice best layout. See the image below.

Drag a column here to group by this column.

Sample Id	Vial position	Conc_Ala	Conc_Arg	Conc_Asp	Conc_C0	Conc_C10	Conc_C12
UCL			00	617,0000	149,0000	3,5800	3,1800
LCL			00	305,0000	67,5000	1,3600	1,5500
QC_H			38	632,2812	121,4808	2,4513	2,1939
QC_H			95	601,5120	114,9927	2,5418	2,0771
QC_H			32	684,3232	134,5123	2,4848	2,2135
QC_H			77	639,7907	117,5036	2,4281	2,2536

5

Export to Excel

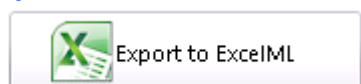
To Export data in Excel format use this button.

The default file name is created using settings in [Export options dialog](#). However you can choice a different name before save it.

The excel file contains data according to the settings in [Export options dialog](#). You can change these settings to choice which information export in the excel file.

Warning: this button create an excel file (.xls extension). If you don't have Microsoft Excel or software able to open this kind of format file, you should use another export format.

6

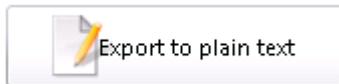
Export to ExcelML

To Export data in ExcelML format use this button.

This button creates an xml file. You can import this file in Microsoft Excel or other spreadsheet software like OpenOffice Calc.

The default file name is created using settings in [Export options dialog](#). However you can choice a different name before save it.

The file contains data according to the settings in [Export options dialog](#). You can change these settings to choice which information export in the file.

7**Export to text file**

To Export data in text format use this button.

This button creates a text file. This is a CSV (comma-separated values) file and it can be opened by any text editor or imported in Microsoft Excel or other spreadsheet software.

If you have to transfer data from IRcPro to other software, you should use this kind of format because very simple and easy to manage.

The default file name is created using settings in [Export options dialog](#). However you can choice a different name before save it.

The file contains data according to the settings in [Export options dialog](#). You can change these settings to choice which information export in the file.