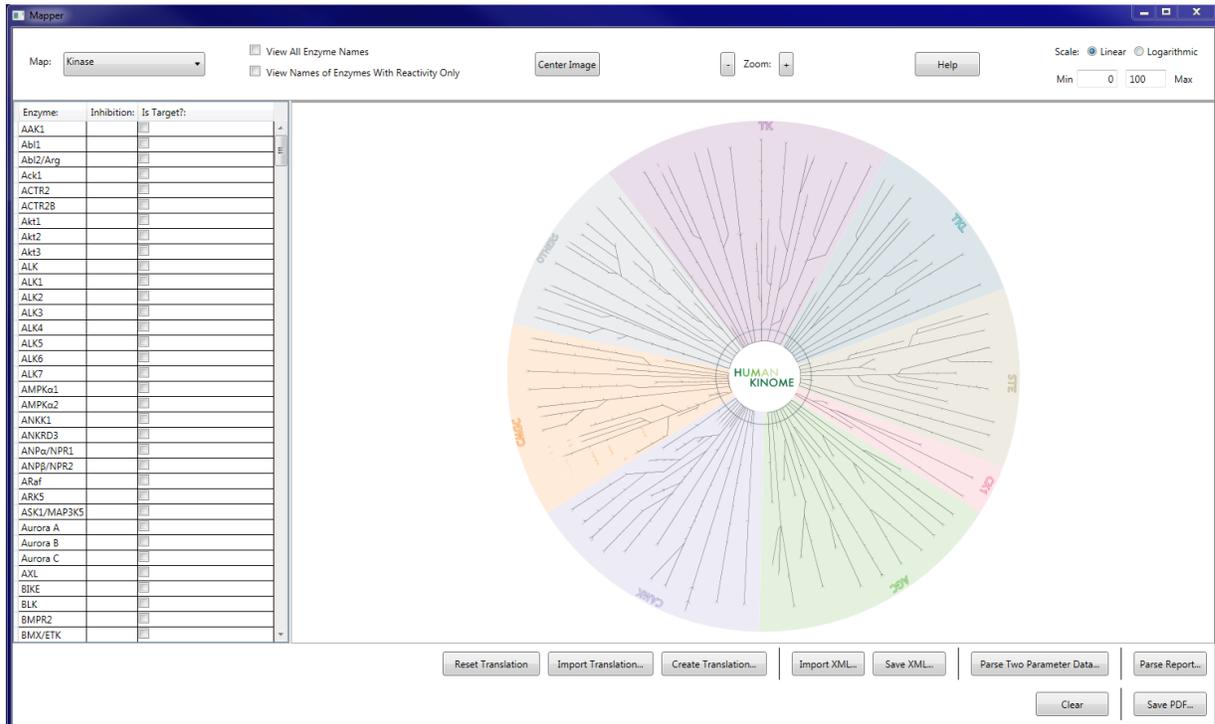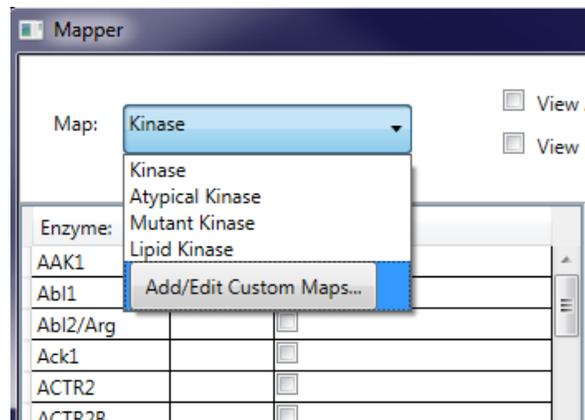# RBC Mapper Guide

Main Window

Map selection:

In the top left hand corner, there is a drop down box with map choices. Selecting a map will display that map's image and compounds. The default map choice is "Kinase".

Manipulating the Image:

The map image can be moved by dragging with the mouse.
The user can zoom in or out of the image by either scrolling with the mouse wheel, or pressing the zoom in and zoom out buttons.

The center image button centers the image.

Viewing Enzyme Names:
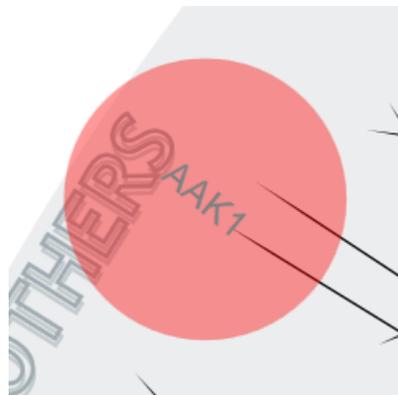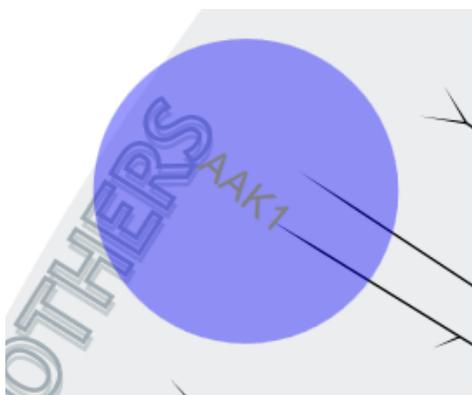Users have two choices for viewing enzyme names on a map image:
1. View all enzyme names by checking the "View All Enzyme Names" box
2. View the names of only the enzymes that have reactivity by selecting the "View Names of Enzymes With Reactivity Only" box

IsTarget? Button:
If there is a particular enzyme which the user would like to highlight in the map image, they can find that enzyme in the list of enzymes at the right hand side of the screen, and select the "IsTarget?" button. This will cause the that enzyme's dot to turn red on the map image.
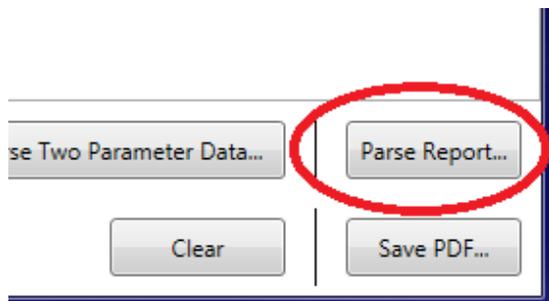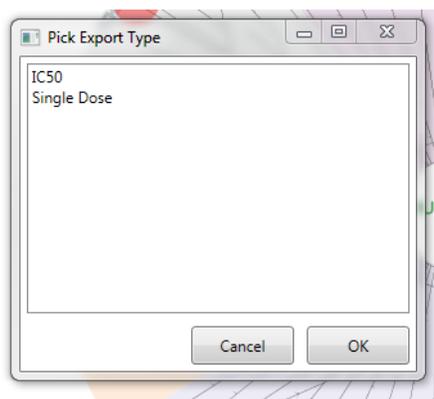

Manually Adding Reactivity Values:
If the user doesn't have a standard format Reaction Biology report, but would still like to produce a map image, they can manually add in reactivity values for each enzyme by entering the value next to the enzyme name in the list at the right hand side of the screen. Pressing the enter key will cause a dot of appropriate size to appear over the enzyme.
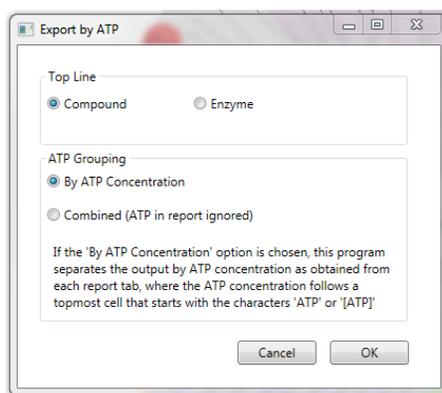
Report Parsing:
The user can parse a Reaction Biology report by pressing the "Parse Report..." button.

After pressing the button, the user selects whether the report is a single dose or IC50 report.
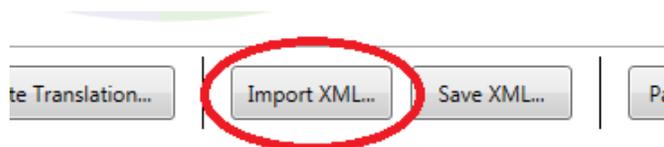

IC50 reports will have more instructions for how the user would like the report parsed.
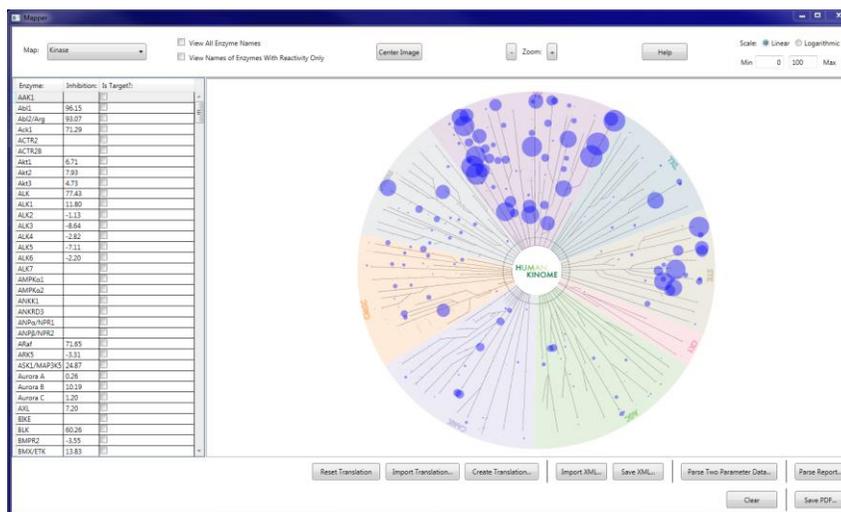

After clicking "OK", the program will produce a folder with an xml file for each compound in the report.

Loading Parsed Report Files (XML format):

Once the user has parsed their report, they can load any of the outputted XML files by clicking the "Import XML..." button.
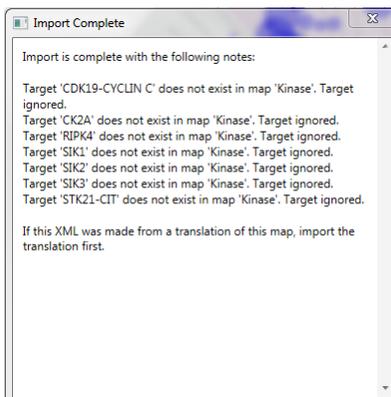

For whichever map is currently selected, clicking this button will load all the reactivities and user settings (scale, view enzymes, etc.) into the program (for enzymes in that map), and alter the map image accordingly.

If there are enzymes in the report that were not found in the map, a list of these enzymes will appear.
This could indicate that the wrong map was selected, or it could come from a report where there are different enzyme types in a single report (i.e. kinase full panels).
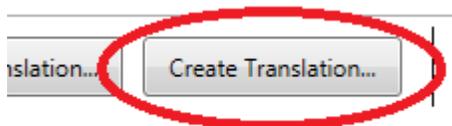

If there are multiple enzyme types in a single report, the same XML file can be used for each compound with each relevant map, just ensure that the desired map is selected, and then click "Import XML...".
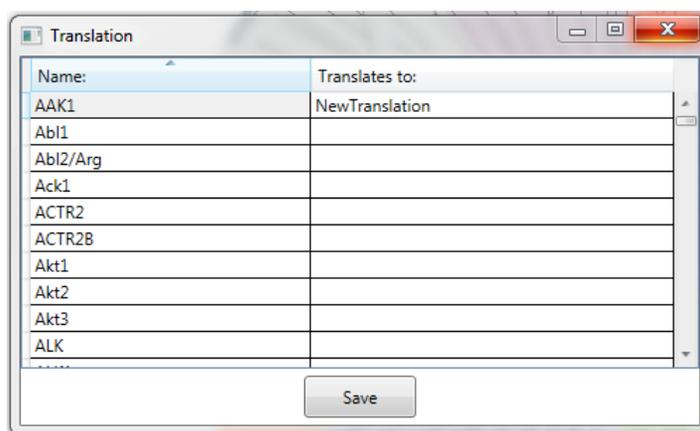
Creating and Importing Translations:
If the user would like to use an existing map, but would like to change some or all of the enzyme names, they can do this by creating a translation.
To create a translation, the user must click the "Create Translation..." button.
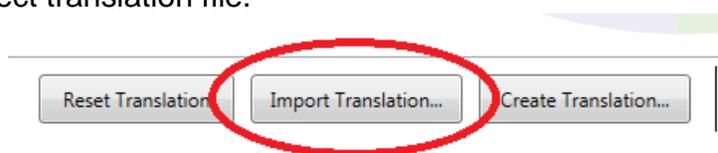

This will bring up a grid with all the enzyme names for the currently selected map with corresponding blank columns where the user can input the enzyme names they would like to use.
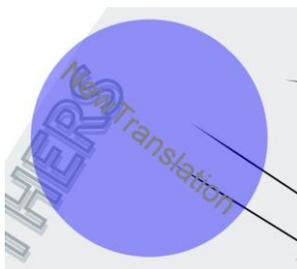When finished, click "Save" to save the translation file.

To use the saved translation file, the user must click the "Import Translation..." button and select translation file.
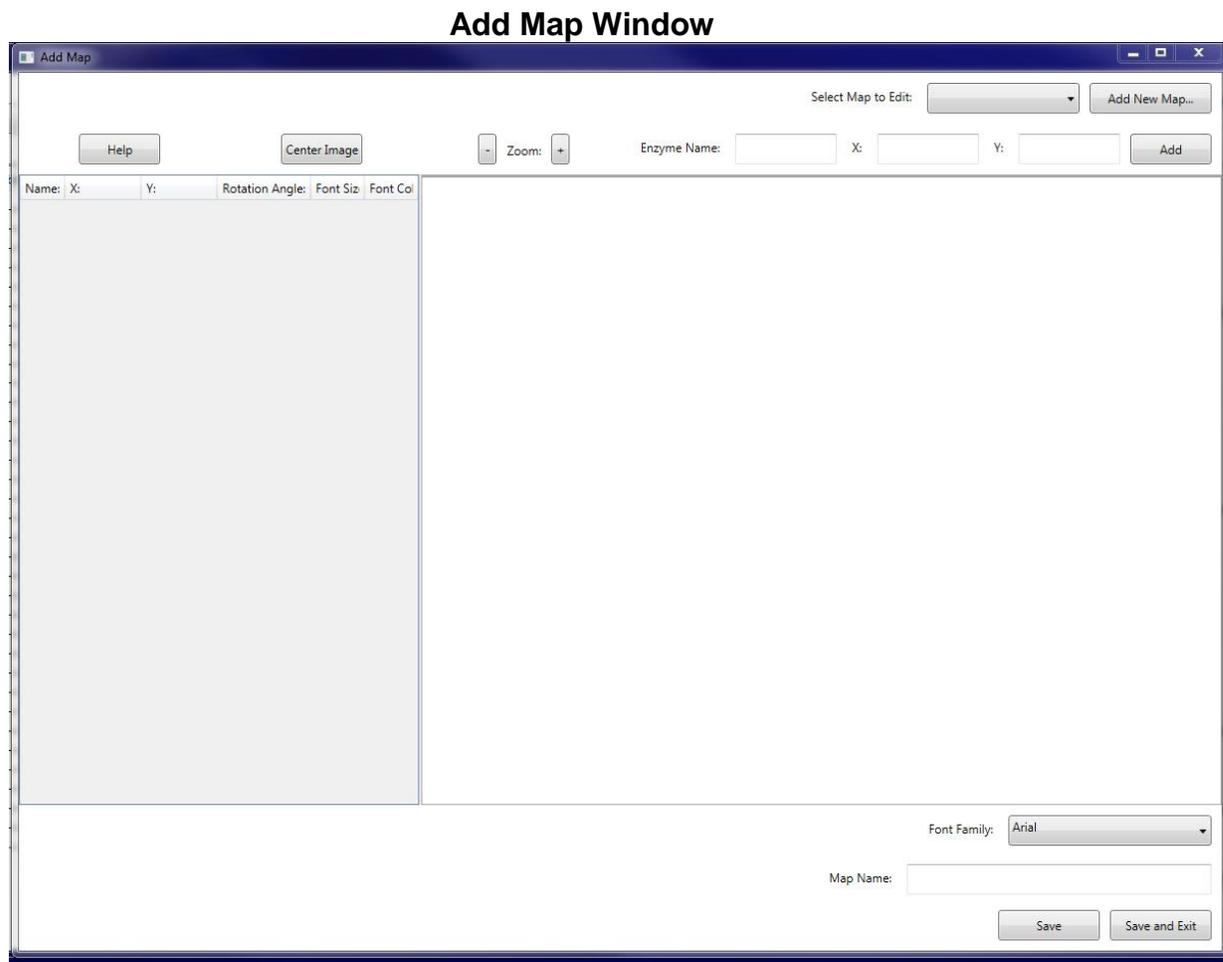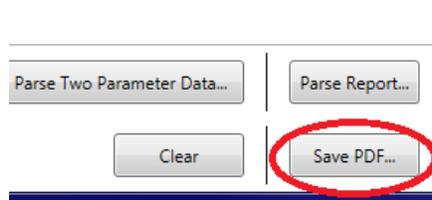

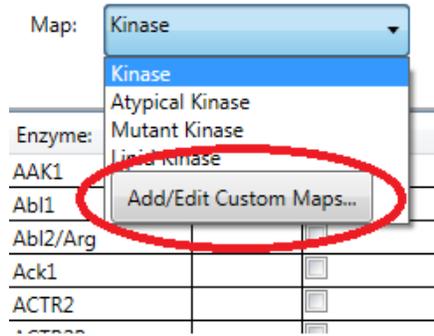This will reload the map image and compound list with the translated enzyme names.

To reset the image to the standard format, simply click "Reset Translation".

Saving a PDF:
The user can save their image as a PDF by clicking the "Save PDF..." button.
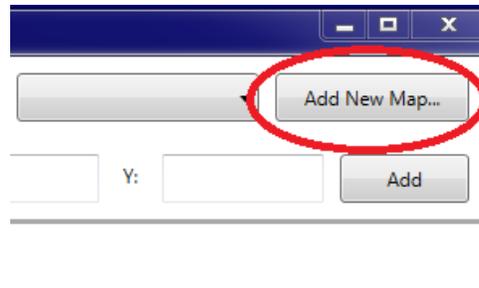

Add Map Window

The user can create their own map images from PDF files by clicking the
"Add/Edit Custom Map..." button in the map selection drop down list.
The user can also use this window to edit any maps that they have created,
though they can not edit Reaction Biology maps.

Loading a New Map Image:

A user can load a new image to use as a map by clicking the "Add New Map..." button. The image file must be in PDF format, and any text in the image will be removed.
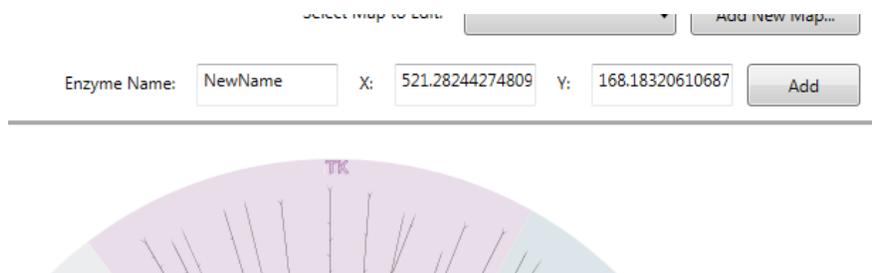

Manipulating the Image:

See the "Manipulating the Image" section above.

Adding Enzymes to the Image:

To add an enzyme to the map, the user must click the point where they wish the enzyme to be placed.

The user must then enter the name of the enzyme in the enzyme name box, and click "Add", or press enter.

In order to add an enzyme, the enzyme name, X coordinate, and Y coordinate must be specified.
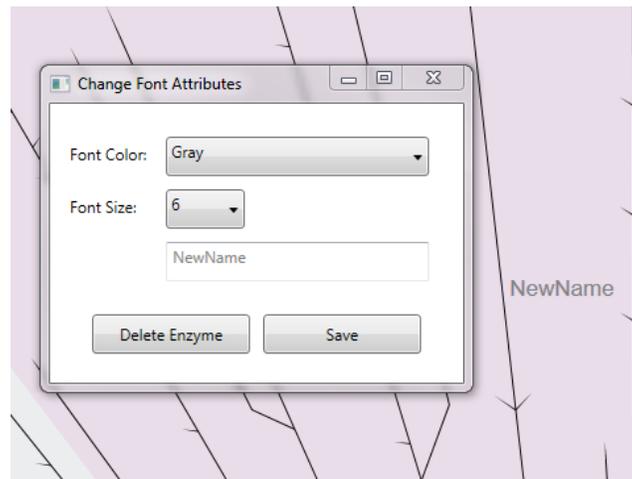
Manipulating Enzymes:

To move an enzyme, double click it, drag it to the desired location, and click once to place it.

To rotate an enzyme, double click it, and press the "A" key to rotate it counter clockwise, "S" to rotate clockwise. Click once to place it.

To change the font color, font size, or name of the enzyme, right click on the enzyme name, enter desired values in the Font Attributes window, and select "Save".
Click "Delete Enzyme" to delete the enzyme.

To change the font family for all enzymes, select the desired font family from the "Font Family" combobox.
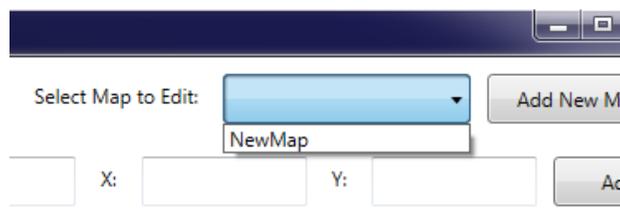

Enzymes attributes can also be changed using the grid at the left. Right clicking on an enzyme in the grid and selecting delete deletes the enzyme.

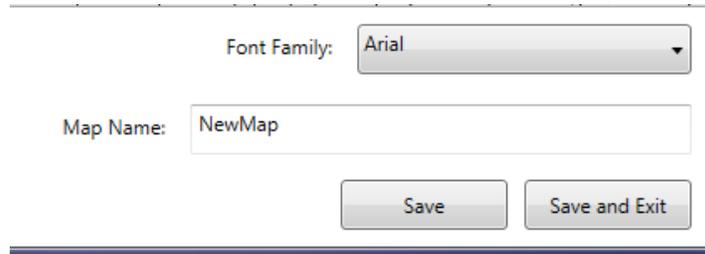| Name:	X:	Y:	Rotation Angle:	Font Size:	Font Color:
NewName	521.2824427	168.1832061	0	6	Gray

Editing an Existing Map:
To edit an existing map, the user must select the map that they would like to edit from the "Select Map to Edit" drop down box. This box will include the names of all maps that were previously created by the user.

Saving a Map:
To save a map, ensure the map has a name (new maps must be named, but old maps being edited will already have a name, which can be changed by changing the map name), and click either the "Save" or "Save and Exit" button.

The "Save" button will save the map and allow the user to continue working, the "Save and Exit" button will save the map and exit the window.