This tutorial contains navigation buttons that enable you to move throughout the tutorial.

Please use the navigation buttons and not the page up/page down or arrow keys to navigate through the tutorials.

This is the 'Next' button. It takes you to the next frame or stop point.

This is the 'Previous' button. It takes you to the previous frame or stop point.

This is the 'Go to frame' button. It takes you to a specified frame.

This is the 'Go to URL' button. It takes you to a website link.

Press the 'Next' button below to start this tutorial.
This tutorial will demonstrate the Scalebar Tool function.

The Scalebar Tools can be used with images generated using the Plot Image Data panel, Plot PCA Scores panel, Plot MAF Scores panel, and the Image Overlay panel.
The Scalebar Tools panel can be opened using the Data Display menu. It can also be opened using a button located on the Plot PCA/MAF panels.
Values can be entered in the boxes below manually, or one can use the 'Show Image Size' button.

Before pressing the button, we must first enter the correct image size in microns into the Image Properties panel.

Let's do that now...
Select 'Image Properties' from the 'Data Display' menu.
Enter the image size in microns in the boxes here and then close the Image Properties panel.
### Data Selection Panel

<table>
<thead>
<tr>
<th>Name of Image Matrix</th>
<th>Name of Variable Matrix</th>
</tr>
</thead>
<tbody>
<tr>
<td>imagedata_DAN...</td>
<td>exactmass_DAN01...</td>
</tr>
</tbody>
</table>

**Scalebar Maker**

Now press the 'Show Image Size' button.

1. **Image size (pixels)**
   - X
   - Y

2. **Image size (microns)**
   - X
   - Y

3. **Scalebar location**
   - Choose an option

4. **Scalebar color**
   - Choose a color

- Add Scale Bar
- Close panel
The correct image sizes are entered in the respective boxes.
This menu allows the user to choose where you want the scale bar located.
## Data Selection Panel

<table>
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</tr>
</thead>
<tbody>
<tr>
<td>imagedata_DAN...</td>
<td>exactmass_DAN01...</td>
</tr>
</tbody>
</table>

### Scalebar Maker

- **Show Image Size**
  - Image size (pixels)
    - X: 256
    - Y: 256
  - Image size (microns)
    - X: 100
    - Y: 100

- **Scalebar location**
  - Choose an option

- **Scalebar color**
  - Choose a color
    - Blue
    - Green
    - Red
    - Cyan
    - Magenta
    - Yellow
    - Black

This menu allows the user to choose a color for the scalebar. It is best to choose a color that will contrast well with the image.
This button will add the scale bar to the main image on the given panel.
Now we will look at how to access the Scalebar Tool from various other panels.

From the Plot Image Data panel, open the Scalebar Tools using the Data Display menu.

Choose display mode
Add to Plot  Reset Plot
Name for Combined Selected Variable Image
Save Combined Variable Image
Create ext Figure  Save Plot to File
Data Selection Panel

Name of Image Matrix: imagedata_DAN01
Name of Variable Matrix: exactmass_DAN01

Variable List:
15.9971
25.0051
26.0054
31.9732
32.9727
34.9663
42.0002
58.9992
63.9539
71.0156
79.9478
96.9589
104.959
152.948
196.926
228.915
249.000

Variable to Plot:

Browse all Peak Images

Create ext Figure  Save Plot to File

The Scalebar Maker panel will open up here.
From the Plot PCA Scores panel, you can access the Scalebar Tools by pressing the 'Show Scalebar Tools Panel'.
The Scalebar Maker panel will open up here, as always.
The Scalebar Maker panel will open up here, as always.
From the Image Overlay panel, you can access the Scalebar Tools from the Data Display menu.
The Scalebar Maker panel will open up here, as always.
Now we will look at an example of using the Scalebar Tools.

Let's add a scale bar to an image in the Plot Image Data panel.

First press the 'Show Image Size' button to get the correct sizes of the image.
We will first place the scalebar in the top right corner.
And we will make it blue.
Press the 'Add Scale Bar' button to add the scalebar to the image.
The scalebar is added to the image.
The user can add scale bars to any corner they want. Here we have added a green bar in the upper left, blue bar in the upper right and red bar in the lower right.

Obviously red is not a good choice for this image.
If you decide you do not like the color or placement, you must first re-create the plot and then you can start over with a new image. In this panel, you must press 'Reset Plot' first.
You can then recreate the plot and add a new scale bar.
A black scale bar looks much better.
You can close all open panels by pressing the close button of the main panel.
Data Selection Panel

Name of Image Matrix
imagedata_dan01

Name of Variable Matrix
exactmass_dan01

That ends this tutorial. Press the button on the left to go back to the previous step. Press the button on the right to start the tutorial over.