



MetaXpress[®] 6 FAQ

Loading Images into a Stack (.stk) File

Date Revised 06/24/15 Version B



Frequently Asked Questions Overview

The purpose of this FAQ guide is to step the user through the process of loading images into a stack (.stk) file both in the **Review Plate Data** dialog as well as from individual images saved on a drive.

A stack (.stk) file can then be used to:

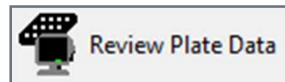
- Create a montage from multiple sites within a well
- Create a color overlay
- Make a movie of Timelapse or Z Series images
- Apply a stack arithmetic algorithm to produce a projection image (i.e. maximum projection, best focus, etc.)



Loading Images from Review Plate Data

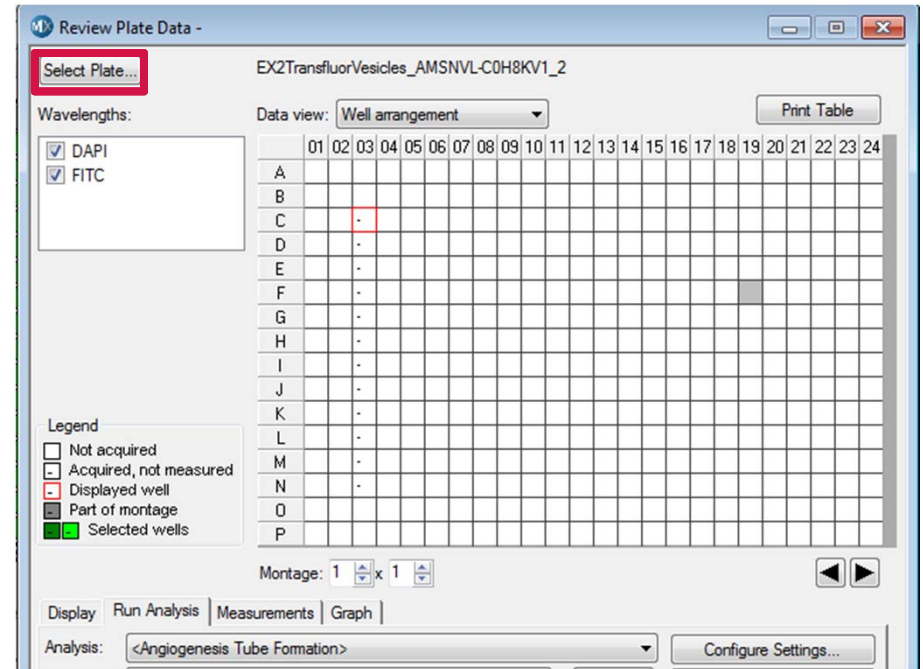
1. Open **Review Plate Data**

- In the main toolbar click on



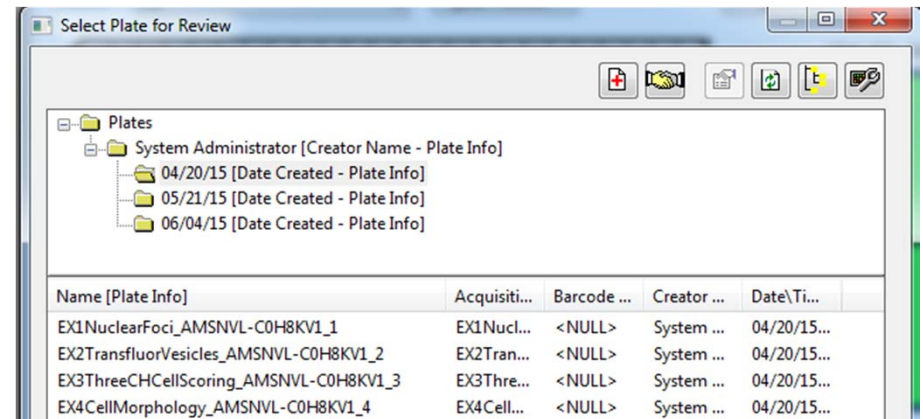
OR

- Under the **Screening** menu, select **Review Plate Data**



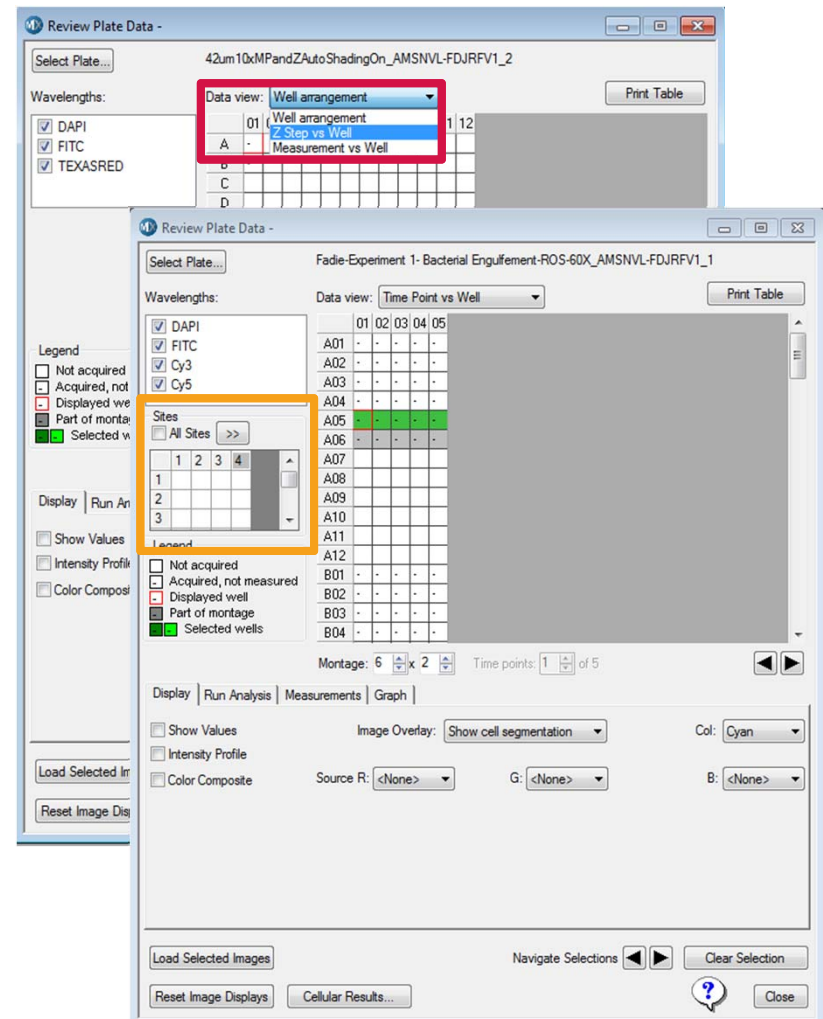
2. Click on the **Select Plate** button

3. Browse through the folders to open the plate of interest



Loading Images from Review Plate Data

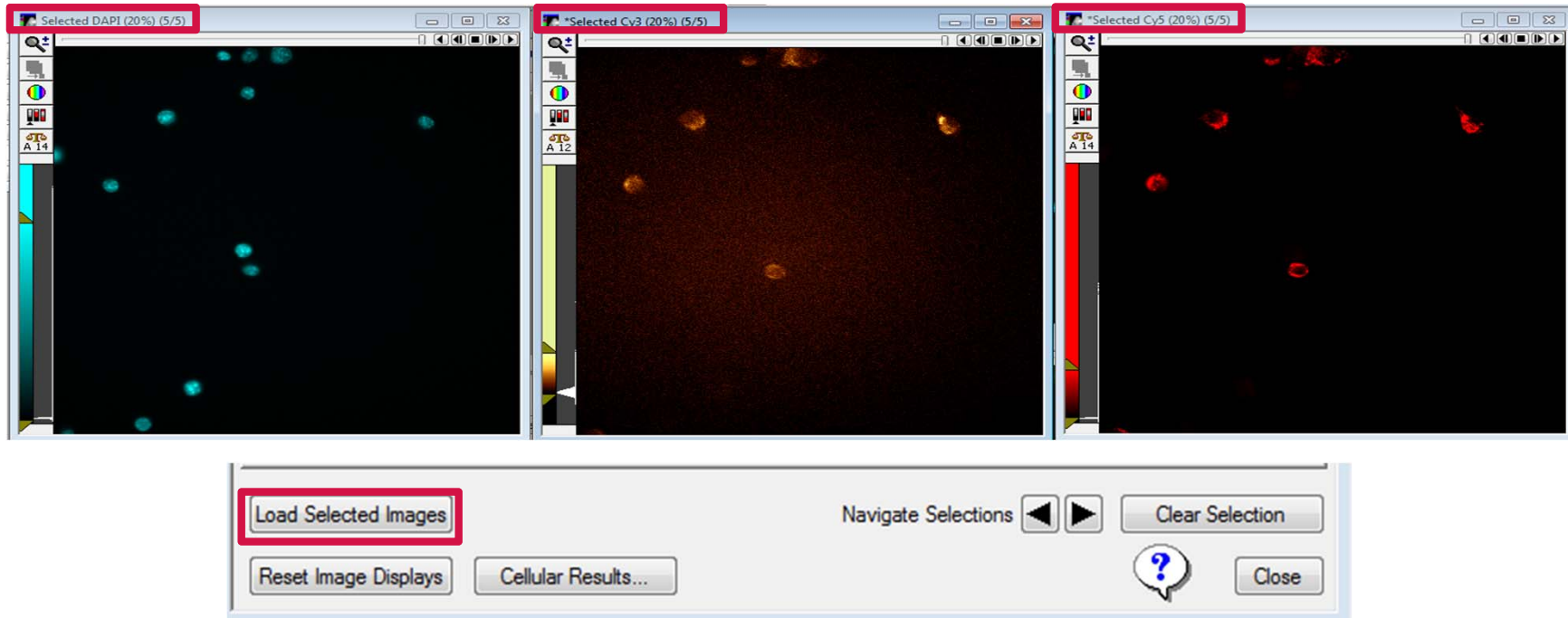
4. Change the **Data View** to
 - **Well arrangement**: to create a stack of sites from one well
 - **Time point vs Well**: to create a stack of time points from one site/well
 - **Z Steps vs Well**: to create a stack of Z steps from one site/well
5. Sites Section:
 - To montage multiple sites, enable **All Sites**
 - To work with Time lapse or Z Series images, disable **All Sites** and click on a site of interest
6. Right-click on the well of interest within the plate grid or image montage (wells are highlighted in green)



NOTE Only select (right-click) on one well. Selecting multiple wells will cause all images to be loaded in one stack for each wavelength



Loading Images from Review Plate Data



7. Click on the **Load Selected Images** button to load images into a stack (.stk) file for each wavelength. These stacks will be named "Selected" plus the name of the selected channel(s).
8. Refer to corresponding chapters for montaging, making a movie, color overlays, or creating a projection image



Working With and Saving Image Stacks (.stk)



Image stacks feature controls that allow you to navigate through the series of loaded images.

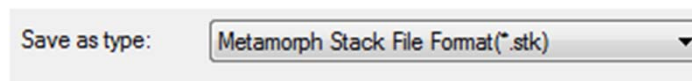
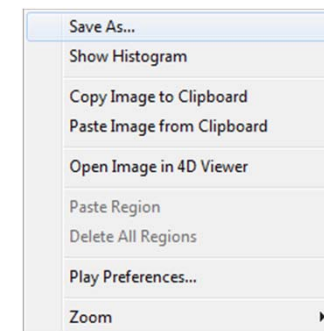
- Play button: play the stack continuously like a movie.
- Advance buttons: advance one frame per click or play through the frames in the indicated direction
- Stop button: stop a play action
- Scroll bar: click and drag this bar to advance manually at your own rate through the stack

To save the .stk file:

- In the main menu, select **File > Save As** Navigate to the final location, name the file, and save as a Metamorph Stack File Format (*.stk)

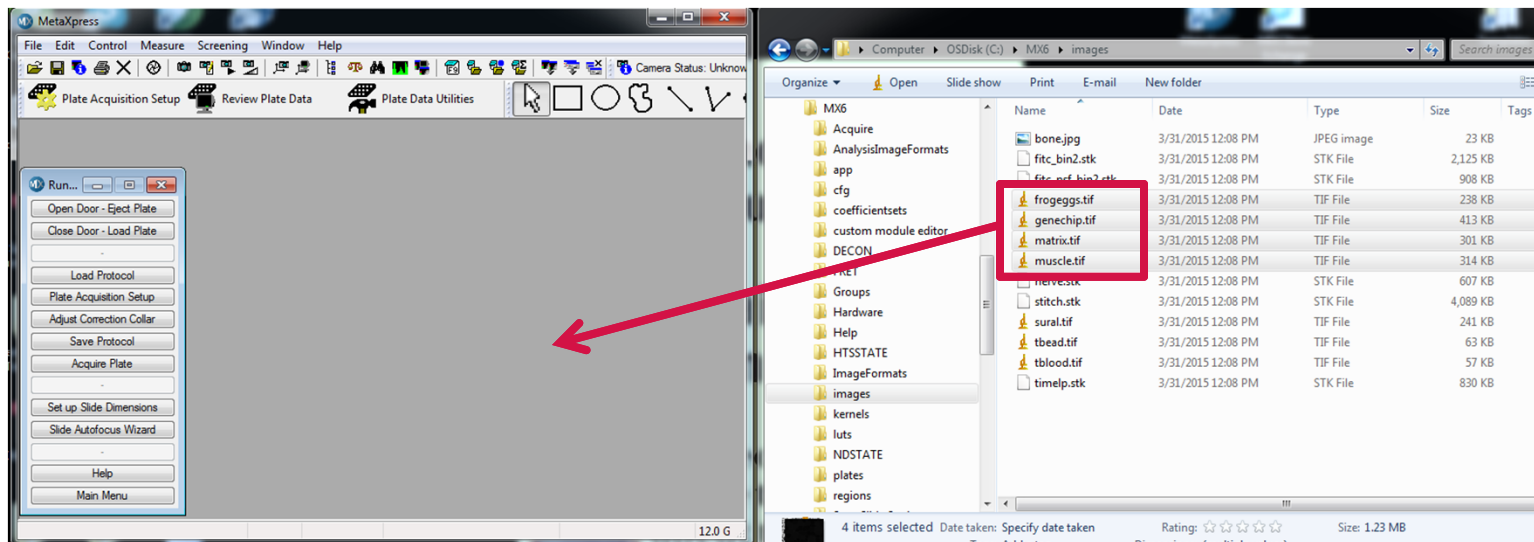
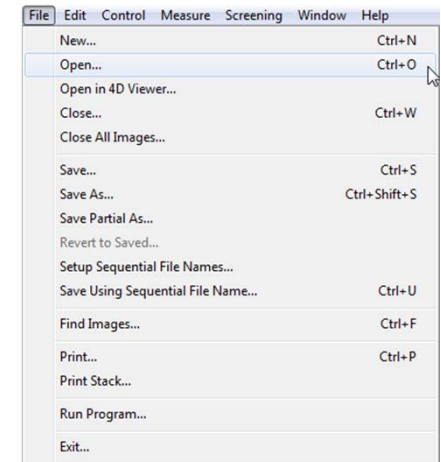
OR

- Right-click in the stack window, select **Save As**, navigate to the final location, name the file, and save as a Metamorph Stack File Format (*.stk)



Loading Individual Images into a Stack File

1. Open the images
 - In the main menu, select **File > Open**. Navigate to the location of the image files of interest
OR
 - In Windows, highlight the images of interest and drag-and-drop the icons onto the MetaXpress window

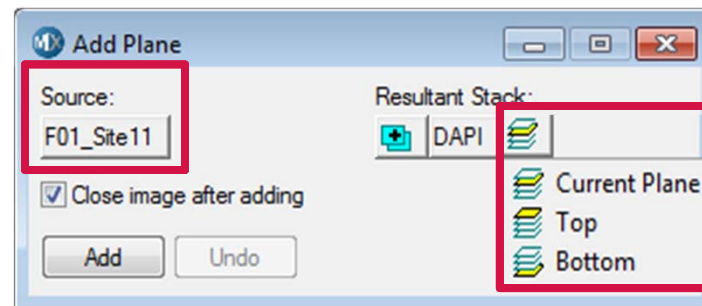
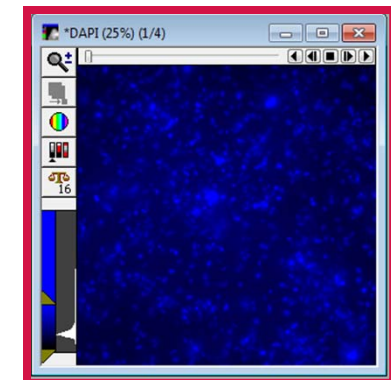
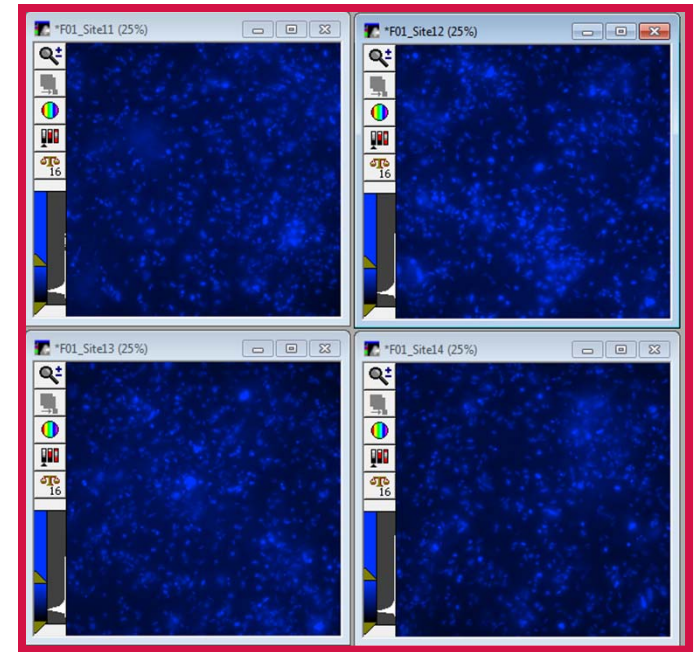


Loading Individual Images into a Stack File

- To add individual images into a stack file
 - In the main menu, select **Edit > Stack > Add Plane**
 - Enable **Close image after adding** if you would like to close the individual image after adding it to the stack (image will not be deleted, just closed)
 - Click on the button below **Source** to select the desired image to be added to the stack (image must already be open)

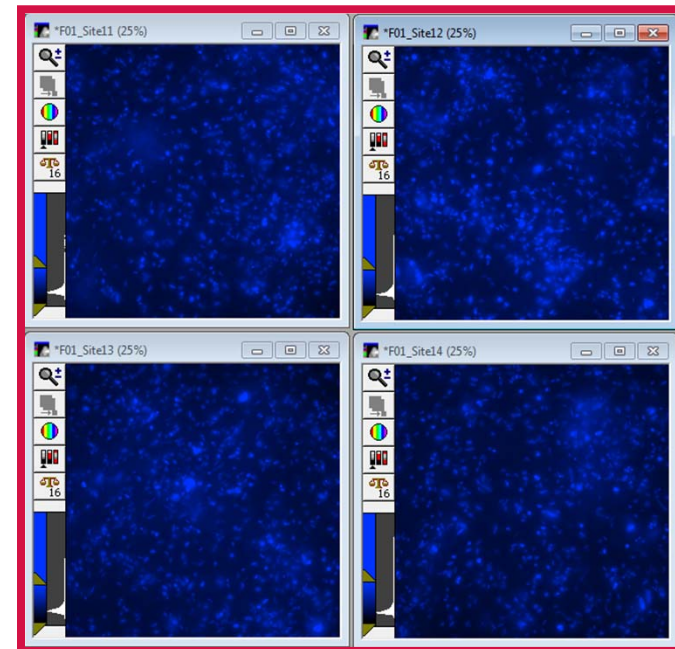
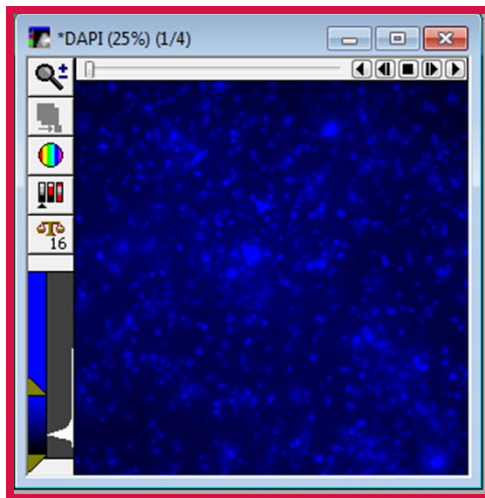
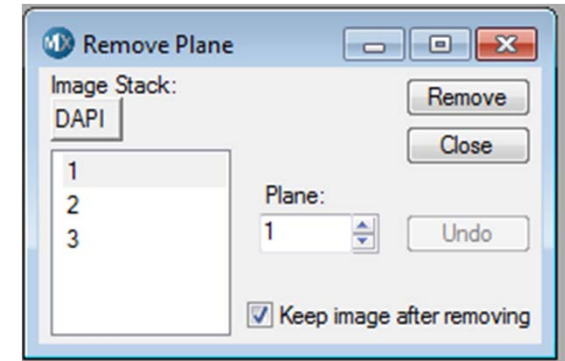
NOTE It is suggested to add planes consecutively to match order of sites acquired, Time points acquired, or Z steps taken.

- Select where to add the new image in the image stack under the **Resultant Stack** section (current plane, top, bottom)
- Click on the **Add** button



Removing Individual Images from a Stack File

- To remove individual images from a stack file
 - In the main menu, select **Edit > Stack > Remove Plane**
 - Enable **Keep image after removing** to copy the plane removed to a separate window
 - Select the desired image plane by either highlighting the plane number or entering the plane number.
 - Click on the **Remove** button



Support Resources

- F1 / HELP within MetaXpress® Software
- Support and Knowledge Base: <http://mdc.custhelp.com/>
- User Forum: <http://metamorph.moleculardevices.com/forum/>
- Request Support: <http://mdc.custhelp.com/app/ask>
- Technical Support can also be reached by telephone:
 - 1 (800) 635-5577
 - Select options for Tech Support → Cellular Imaging Products → ImageXpress Instruments





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