

DAB Analysis App

Description:

The main purpose of this application is to calculate the area and IOD of the stained region and objects, in order to get the mean density of those specified regions.

User Interface:

Source group:

- **Active Image:** Select this option to have Image-Pro Premier analyze only the currently active image
- **All Open Images:** Select this option to have Image-Pro Premier analyze all open images
- **All Images in Folder:** Select this option to have Image-Pro Premier analyze all color images in the selected folder. Click on the folder tool to select the folder containing the images to be analyzed.

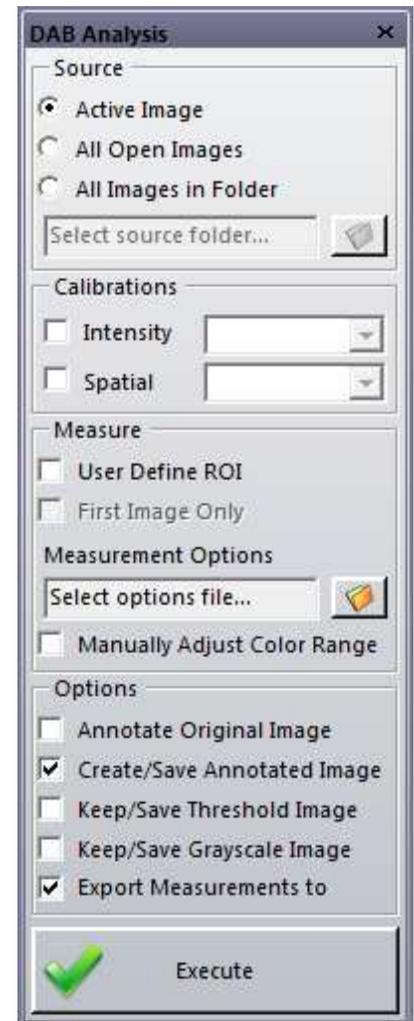
Calibration group:

- **Intensity:** Select this checkbox to apply an intensity calibration definition to the project. If checked, select the desired Intensity calibration from the pull-down list box. The specified calibration definition will be applied to all images processed by the app.
- **Spatial:** Select this checkbox to apply a spatial calibration definition to the project. If checked, select the desired spatial calibration from the pull-down list box. The specified calibration definition will be applied to all images processed by the app.

Measure group:

- **User Define ROI:** If checked, Image-Pro Premier prompts you to supply an ROI – either for all images, or only for the first image, depending on whether you check the First Image Only checkbox (described below). If unchecked, no ROI is used.
- **First Image Only:** if checked, Image-Pro Premier prompts you to supply an ROI for the first image only – the same ROI is then applied to all subsequent images processed. If unchecked, you will be prompted for an ROI for each image processed.
- **Measurement Options:** Select the Measurements and Segmentation options file you want to use. This determines what measurements are collected, and what segmentation parameters are used to locate the objects of interest. See “Note 2” below for more information.
- **Manually Adjust Color Range:** if checked, Image-Pro Premier prompts you to adjust the color segmentation on each image. See “Note 3” below for more information.

Options group:



- **Annotate Original Image:** Select this option to add measurements as annotation on the original image (this option is not available when the “All Images in Folder” option is selected).
- **Create/Save Annotated Image:** Select this option to create a copy of the original image that has measurements as annotations and is automatically saved in the folder of the original image. It will be automatically saved with the suffix “_DAB.”
- **Keep/Save Threshold Image:** Select this option to keep open and save intermediate threshold images. These images will be automatically saved with the suffix “_Threshold” in the folder of the original images.
- **Keep/Save Grayscale Image:** Select this option to keep open and save intermediate grayscale images. These images will be automatically saved with the suffix “_Mono” in the folder of the original images.
- **Export Measurements to Excel:** Select this option to have Image-Pro Premier automatically export measurements to Excel for each image

Execute:

- **Execute:** Executes the macro on selected source image(s).

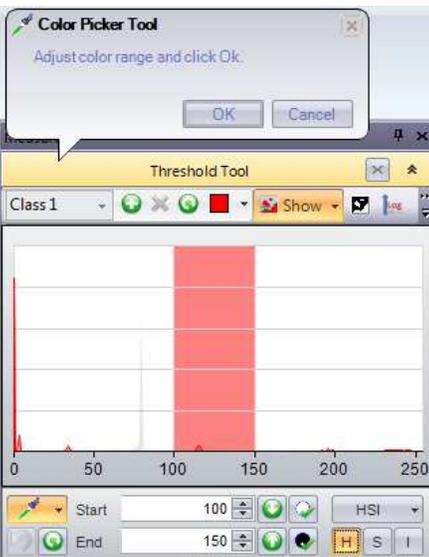
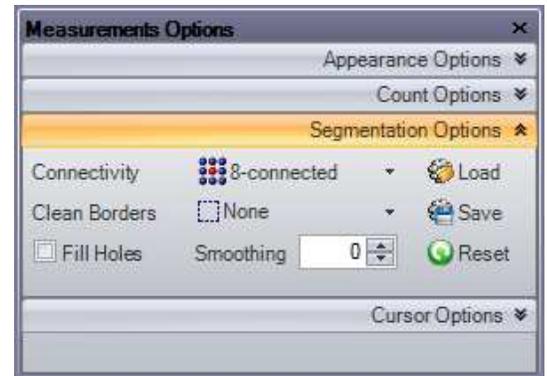
Note 1:

If the “User Define ROI” option is selected, then the app will prompt you to select an ROI on the active image with the Rectangular tool. You can switch the tool type through the **Select -> Regions of Interest** ribbon group prior to defining the ROI.



Note 2:

To create a measurements and segmentation options file, open a representative image for the images you want processed using the DAB Analysis App, then use the Image-Pro Premier tools to select the desired set of measurement options and set the desired segmentation definition parameters. When you are done, use the **Count/Size -> Measurements -> Options -> Segmentation Options -> “Save”** option to create a Measurements and Segmentation options file.



Note 3:

If the “Manually Adjust Color Range” option is selected, the app will prompt you to adjust the color range definitions on the active image by using the Color Picker or Threshold Tool.