Investigating localization within a sample section

Examples

1. Which compounds have which distributions within the sample section?

2. What components colocalize with known localization?

3. Divide up pixels into specified cluster numbers.

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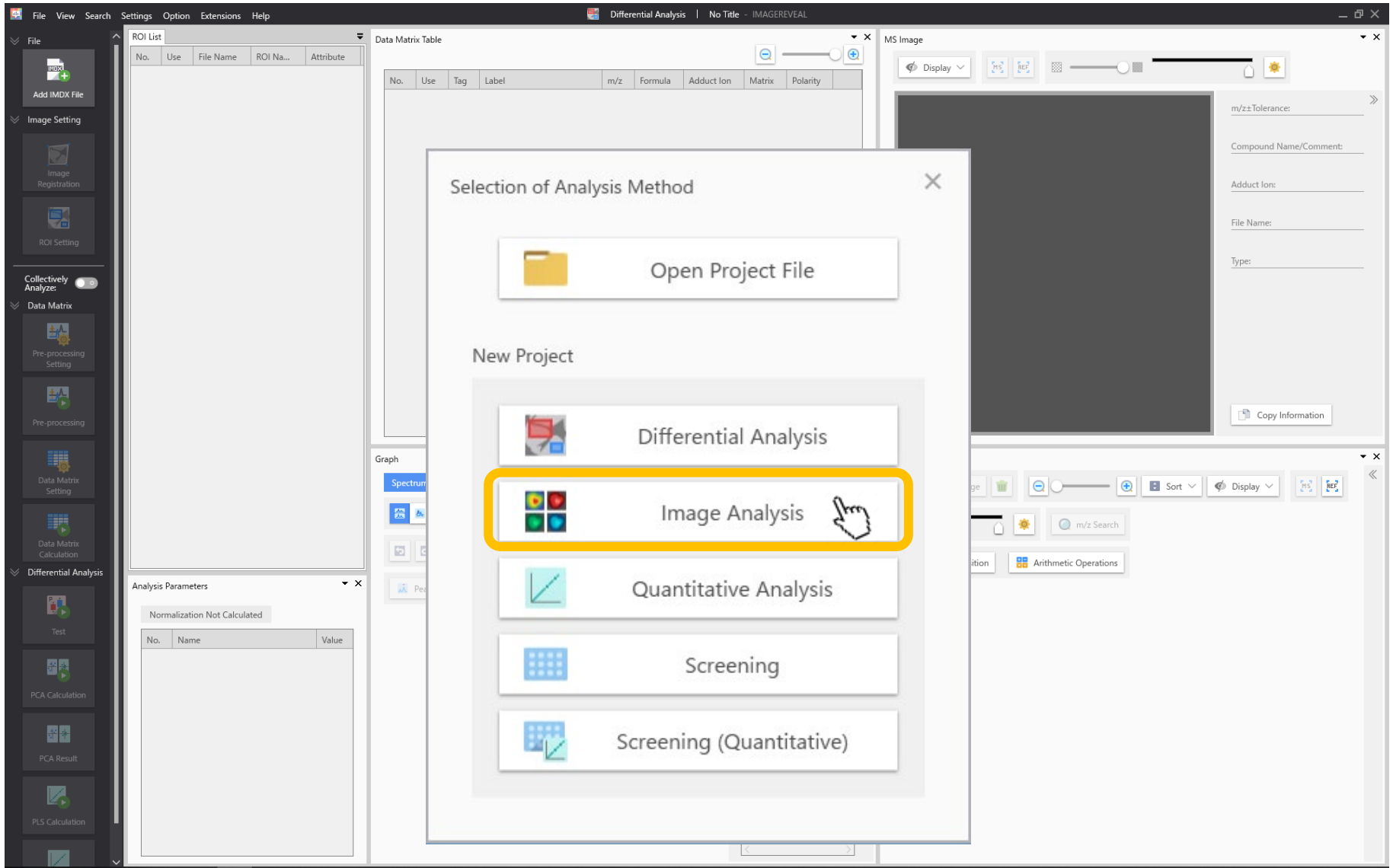
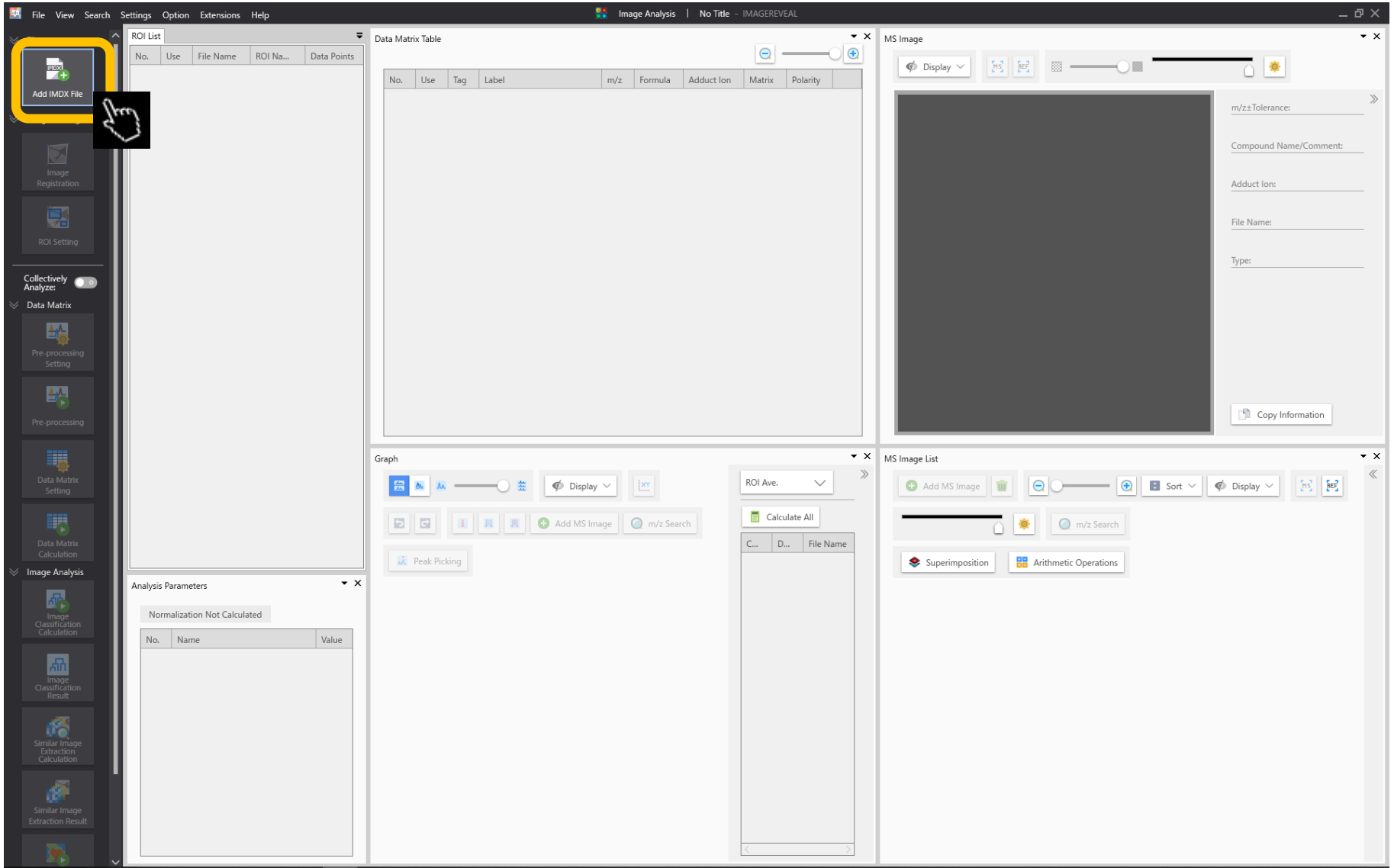
Steps

1. Select “Image Analysis”
2. Read in data
3. ROI settings if necessary
4. Data matrix table calculations
5. Image classification

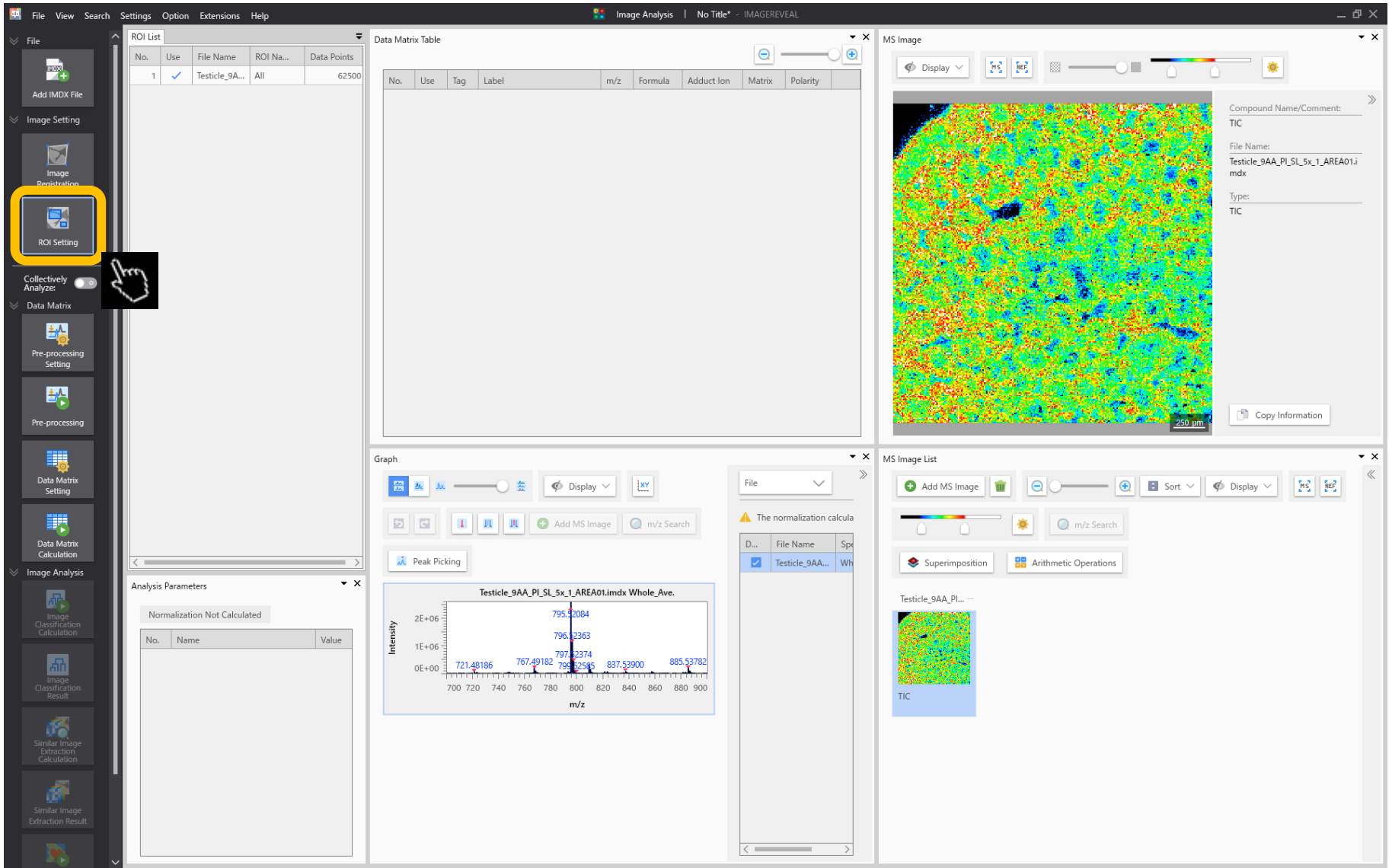
1. Select “Image Analysis”



2. Add data file (.imdx)

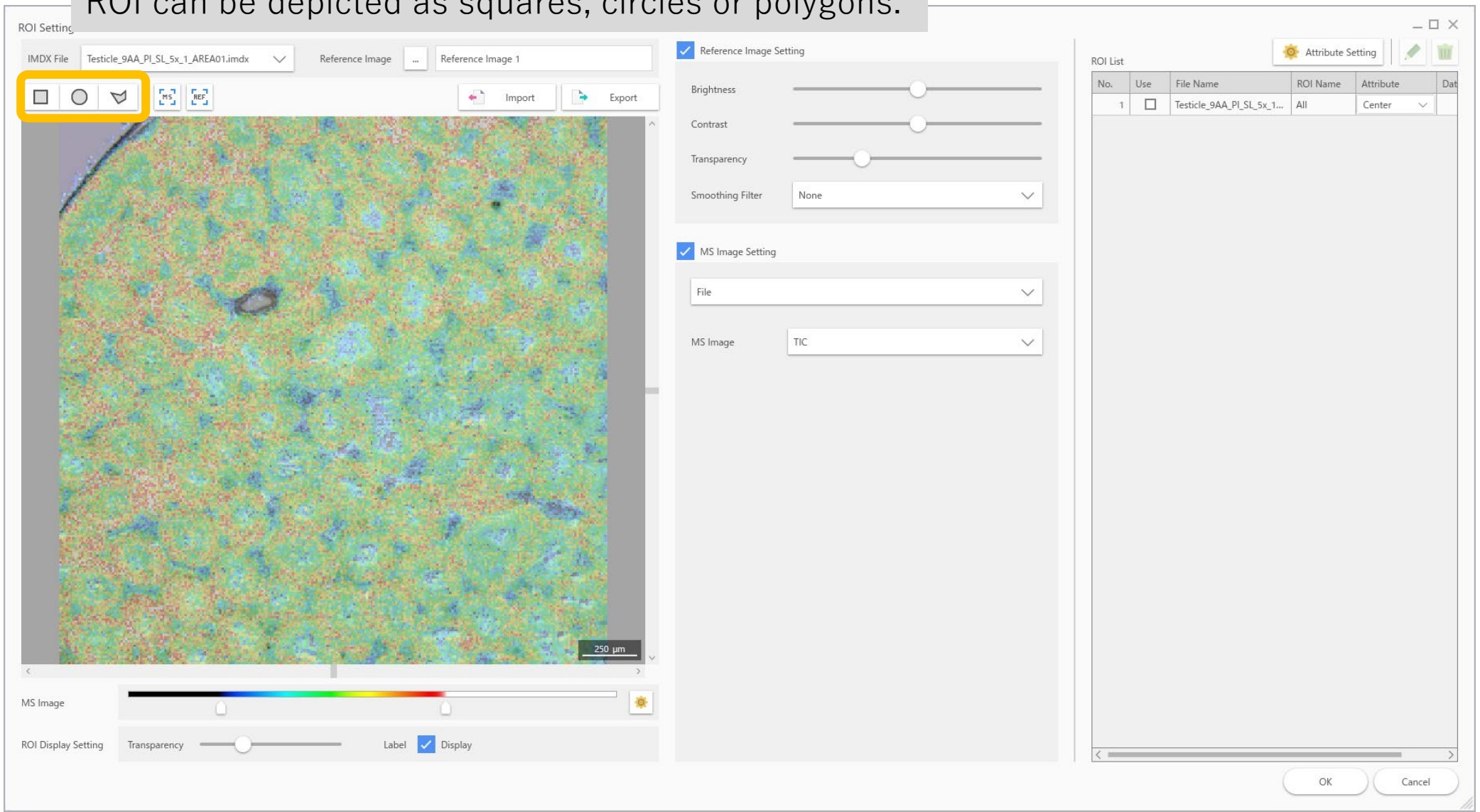


3 Set ROI if necessary



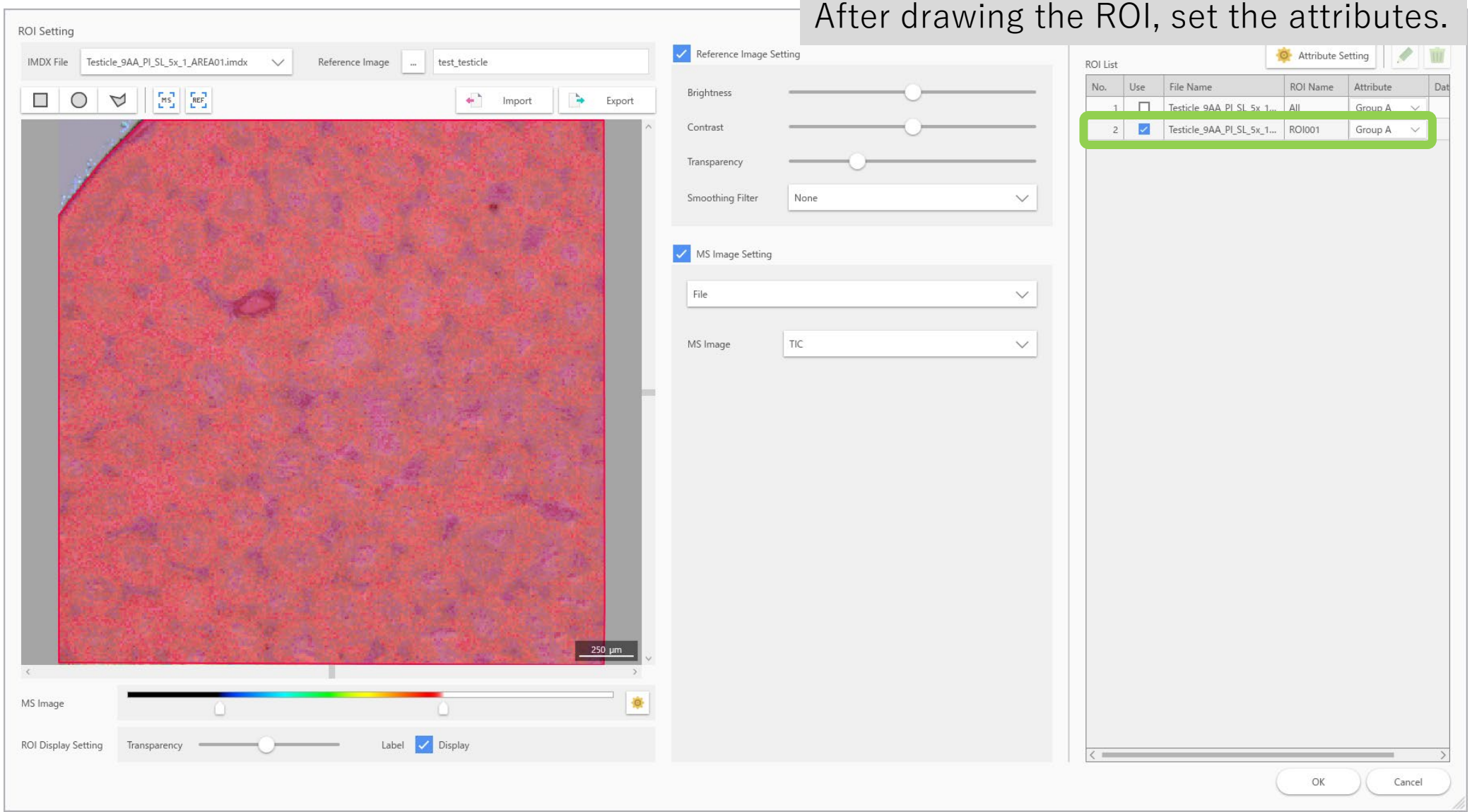
3.1 Select the region to be processed

ROI can be depicted as squares, circles or polygons.

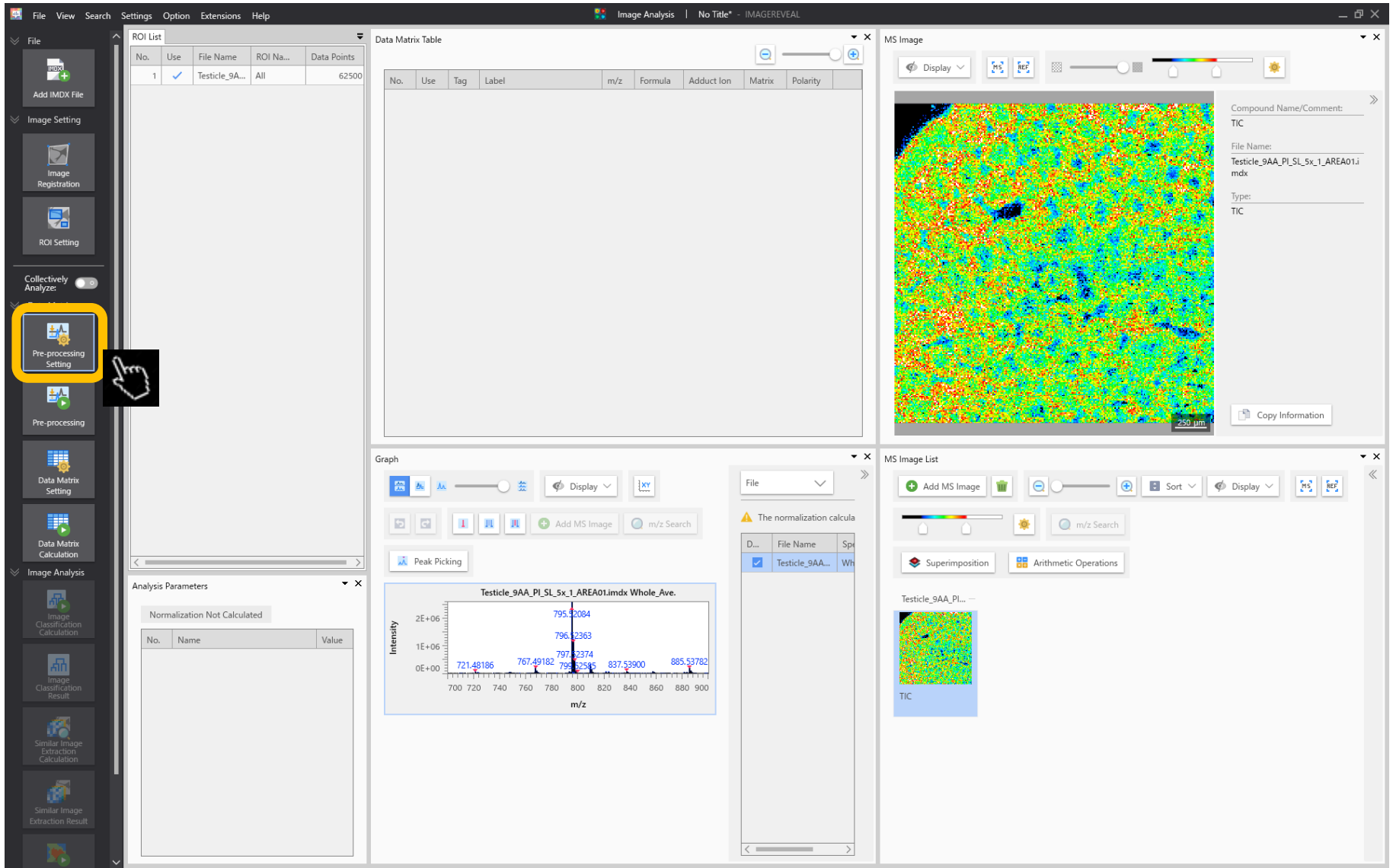


3.2 The ROI is listed in the ROI list.

After drawing the ROI, set the attributes.



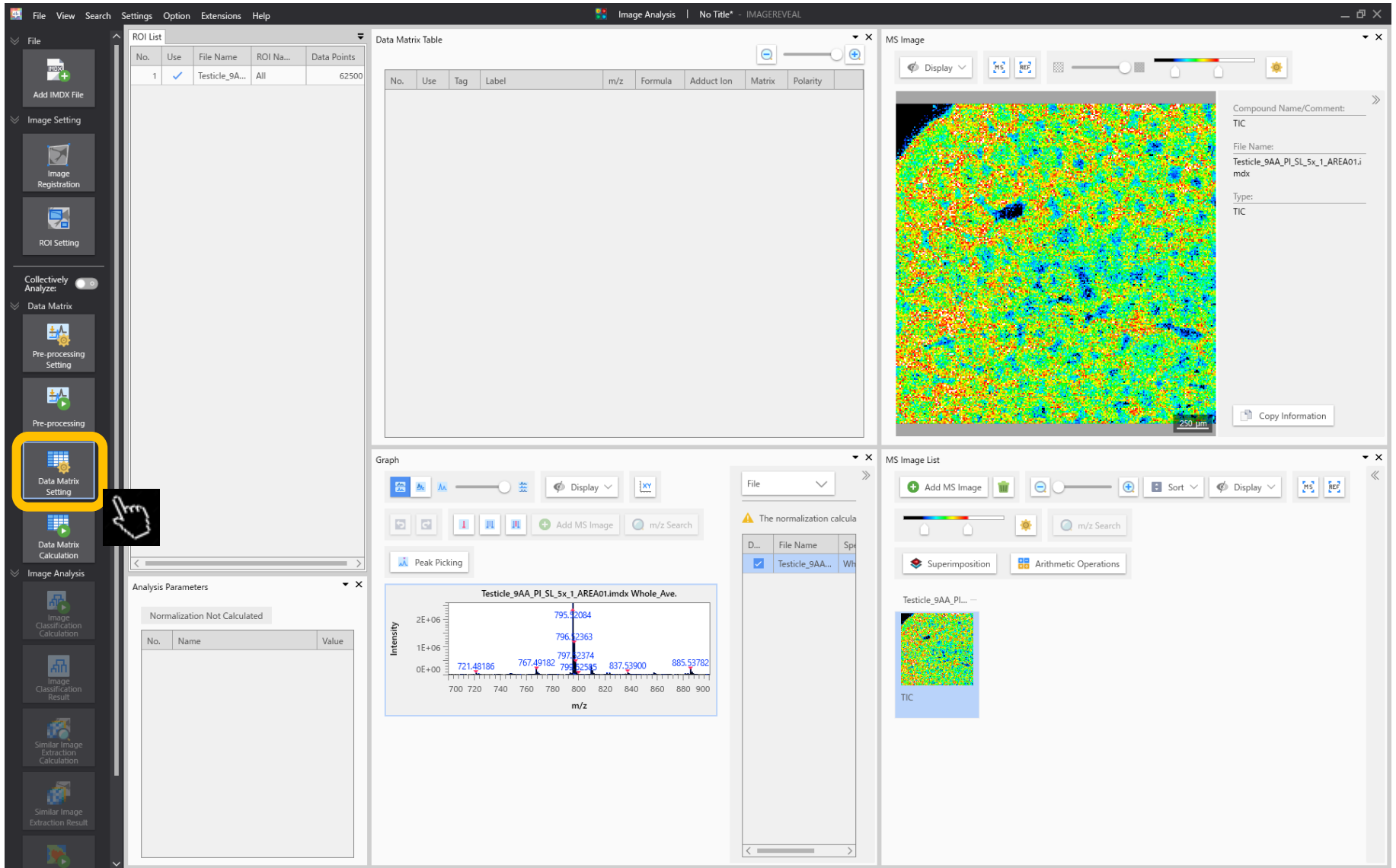
4. pre-processing settings



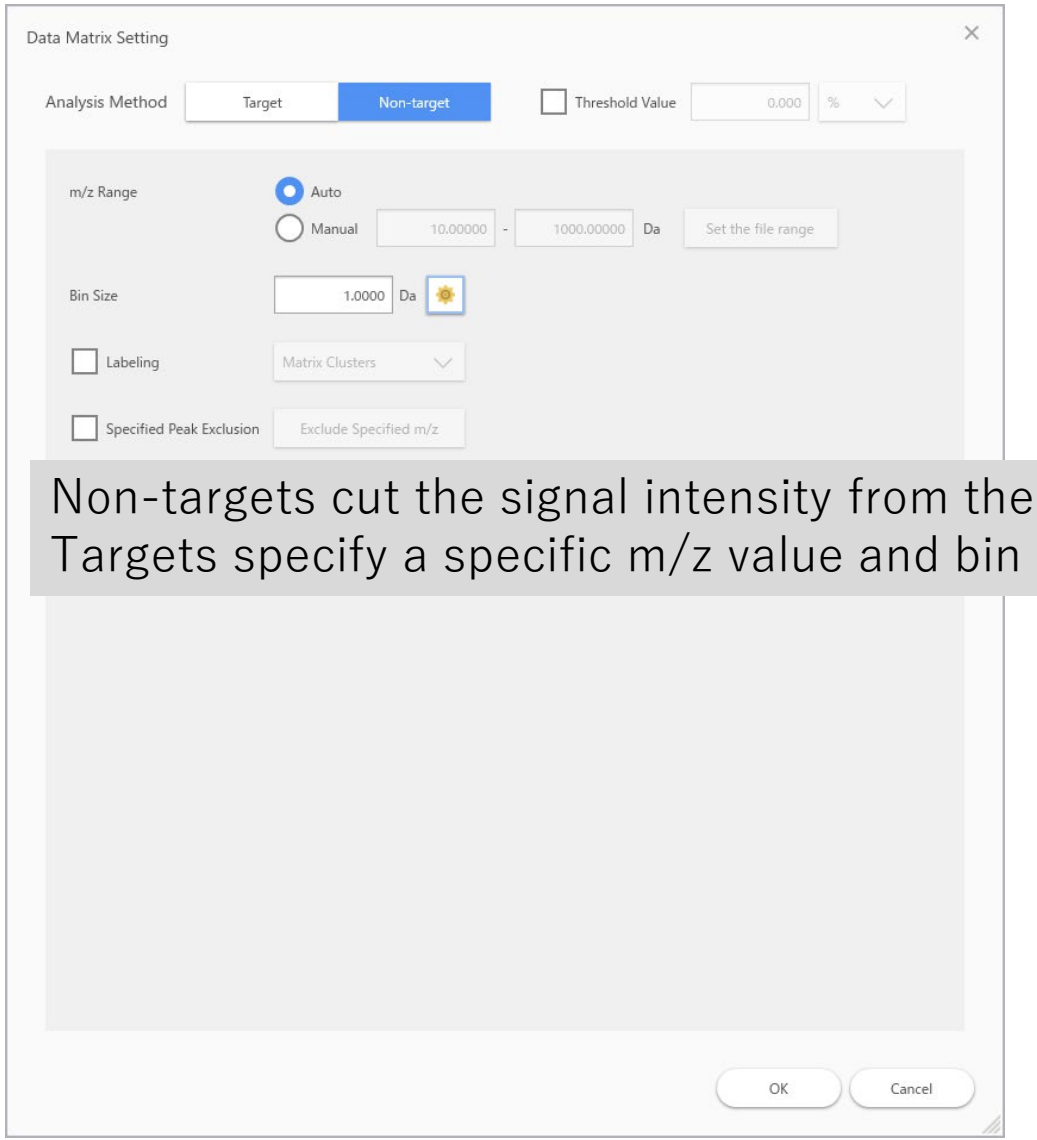
4.1 Pre-processing (normalization) settings

Sets the "normalisation" criterion.
“TIC” are common.

4.2 Data matrix settings

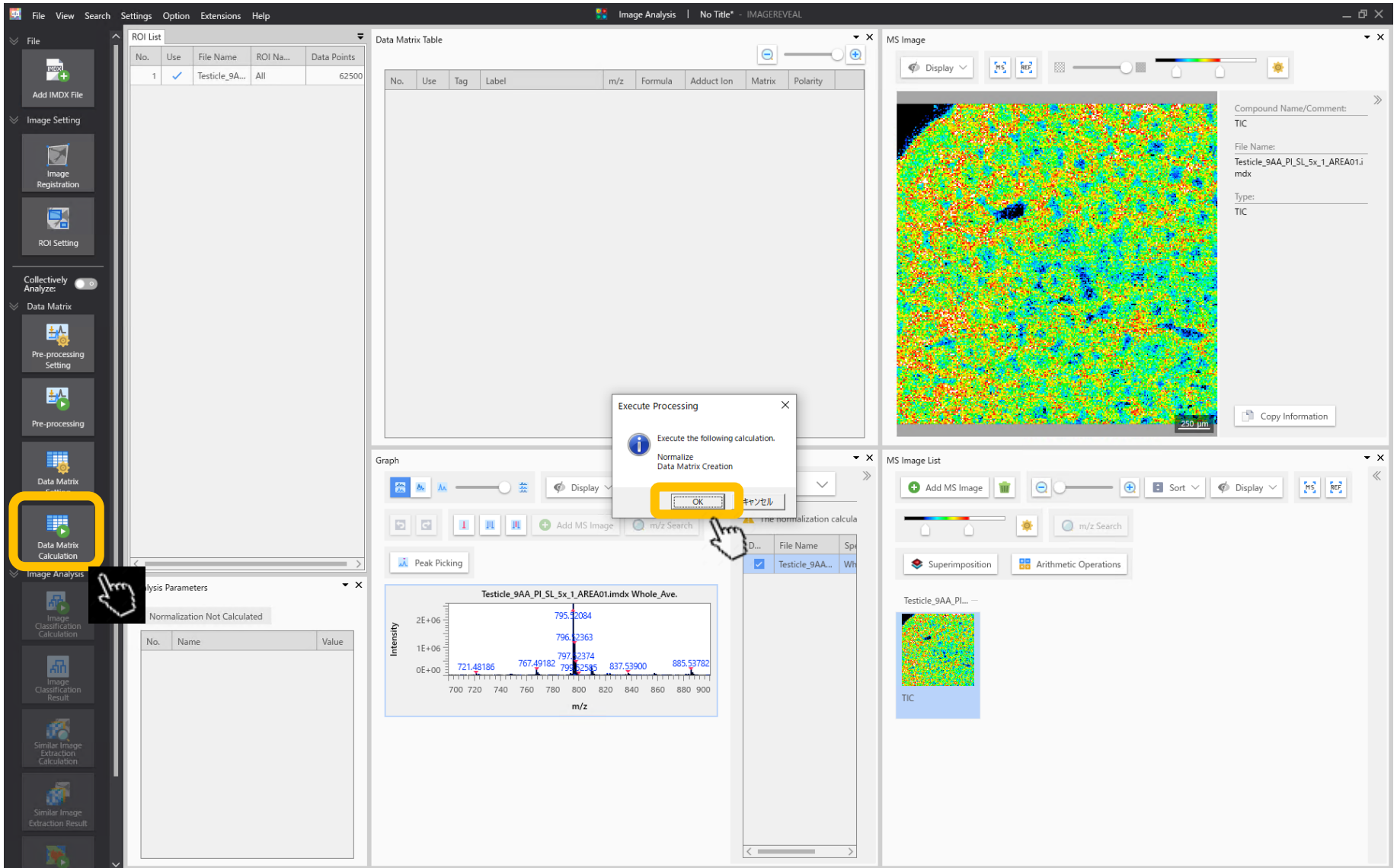


4.3 Data matrix settings

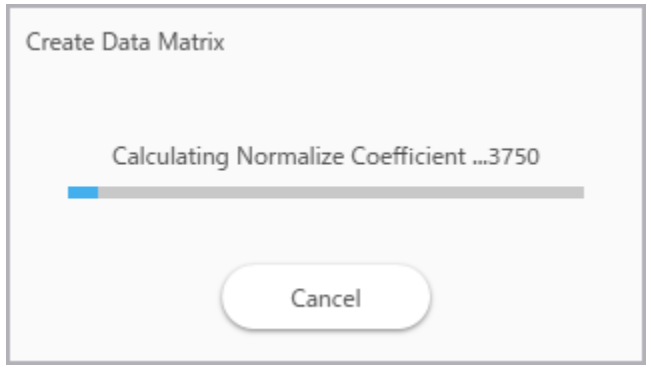


Non-targets cut the signal intensity from the spectrum at a fixed width.
Targets specify a specific m/z value and bin size.

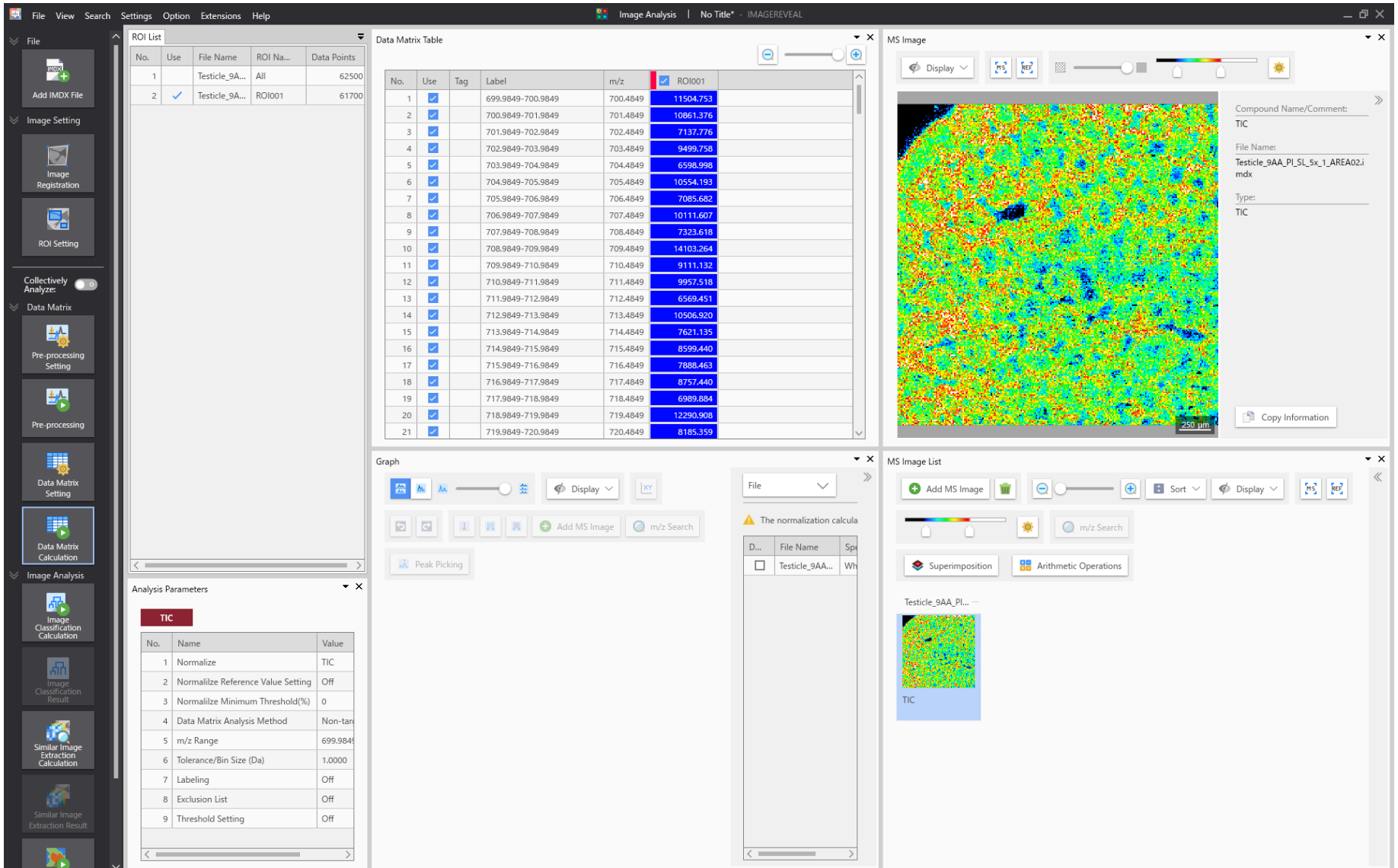
4.4 Data matrix calculations



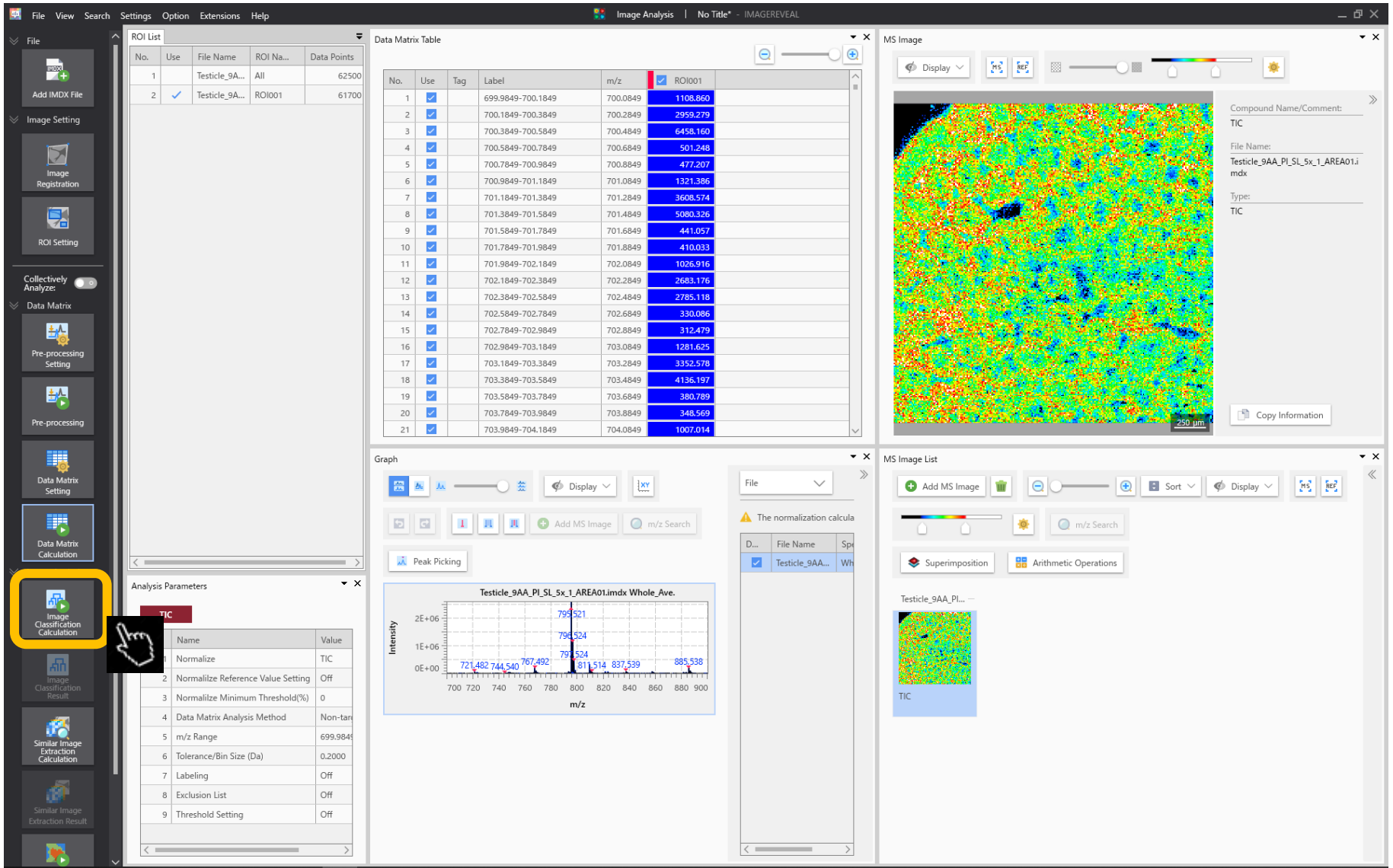
4.5 Calculations window



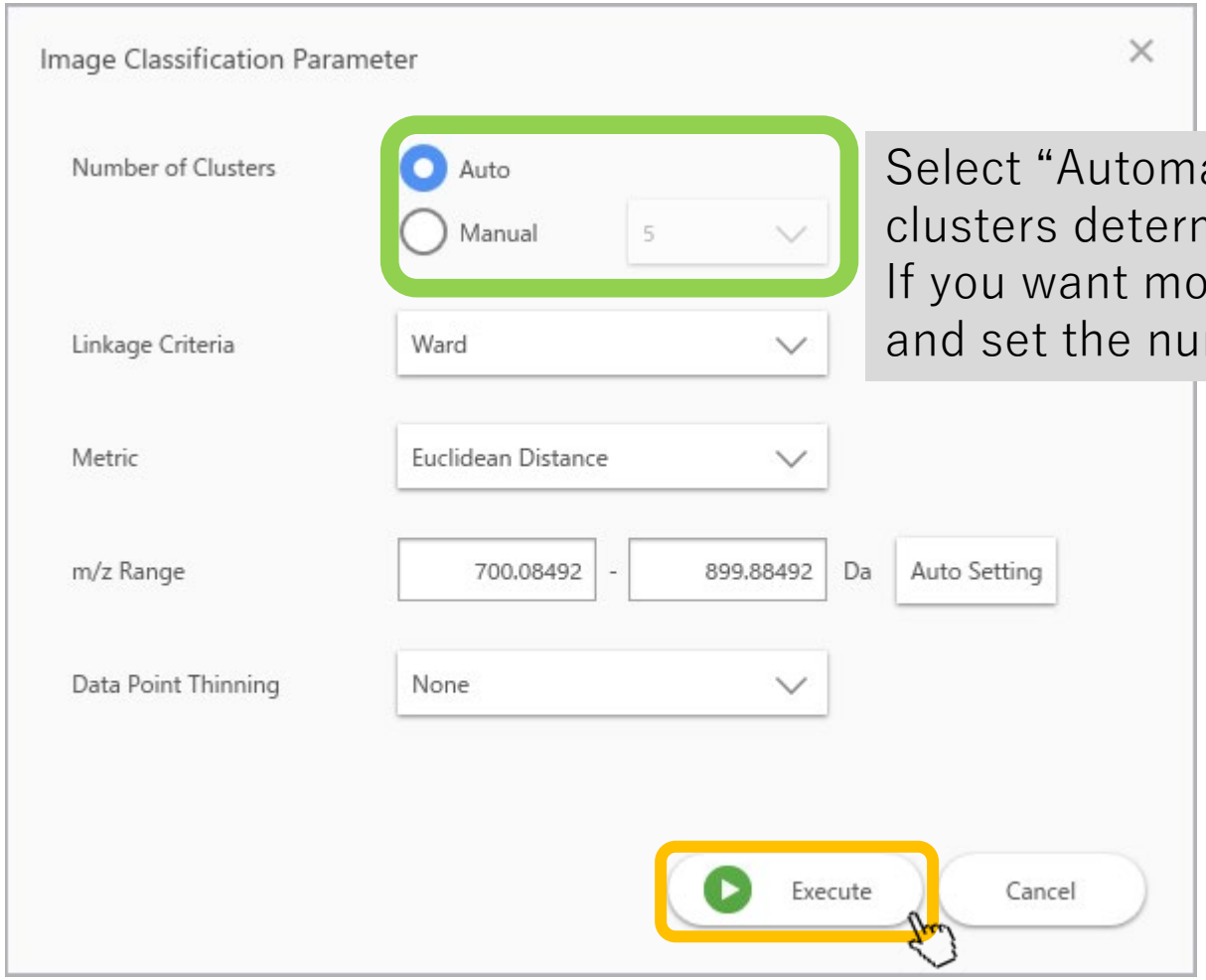
4.6 Data matrix calculations are complete



5. Select “Image Classification Calculation”

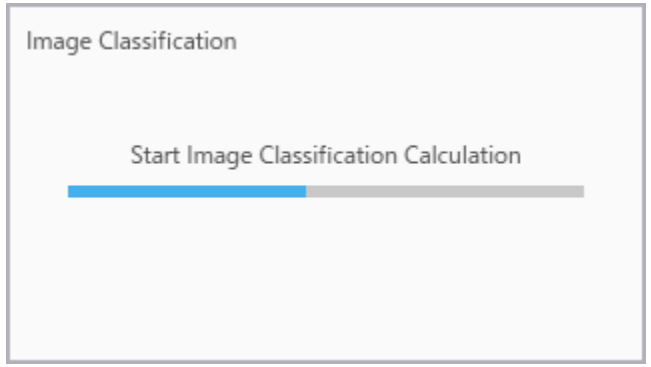


5.1 Image classification parameters

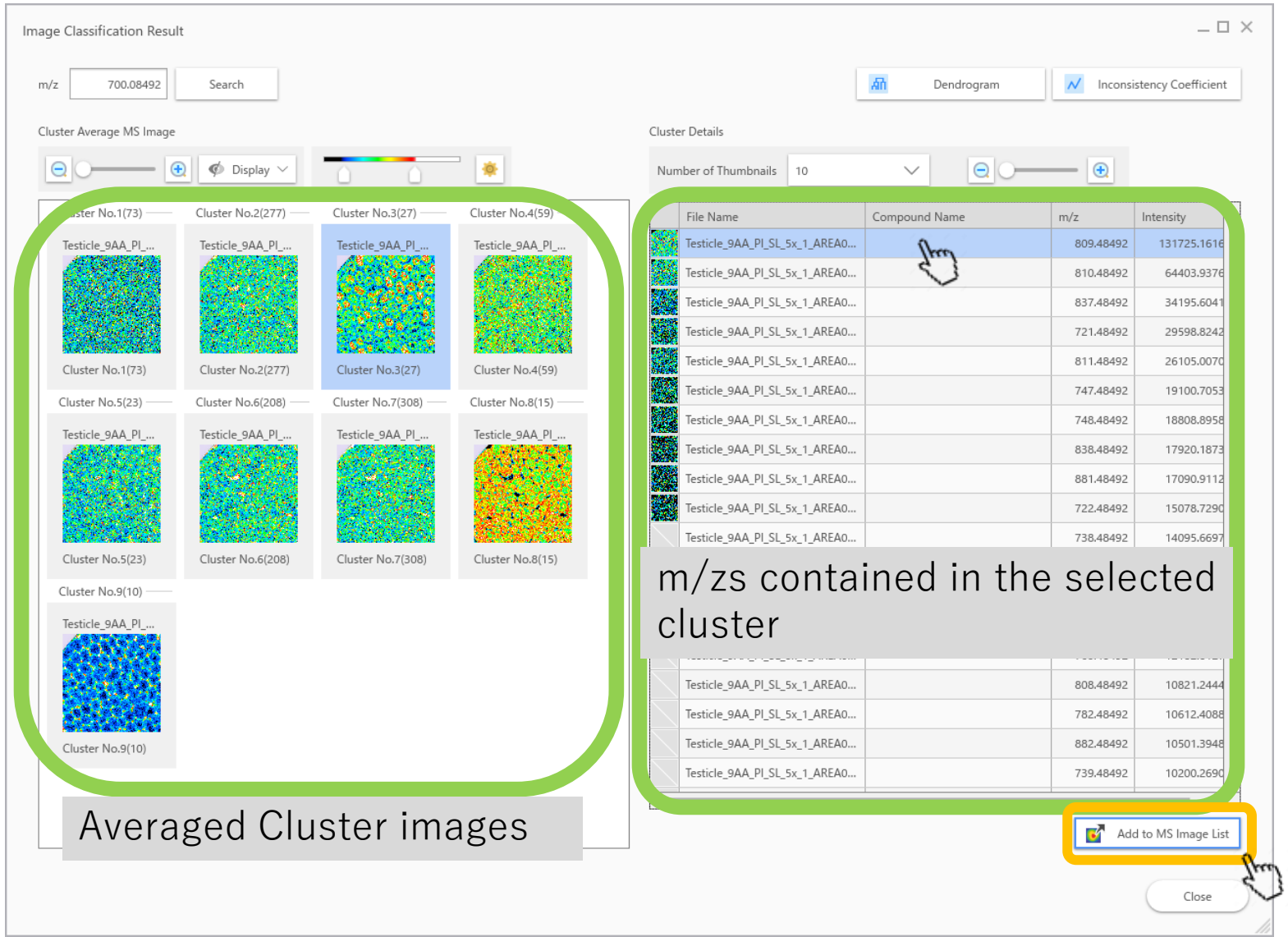


Select “Automatic” to have the number of clusters determined automatically.
If you want more clusters, select “manual” and set the number.

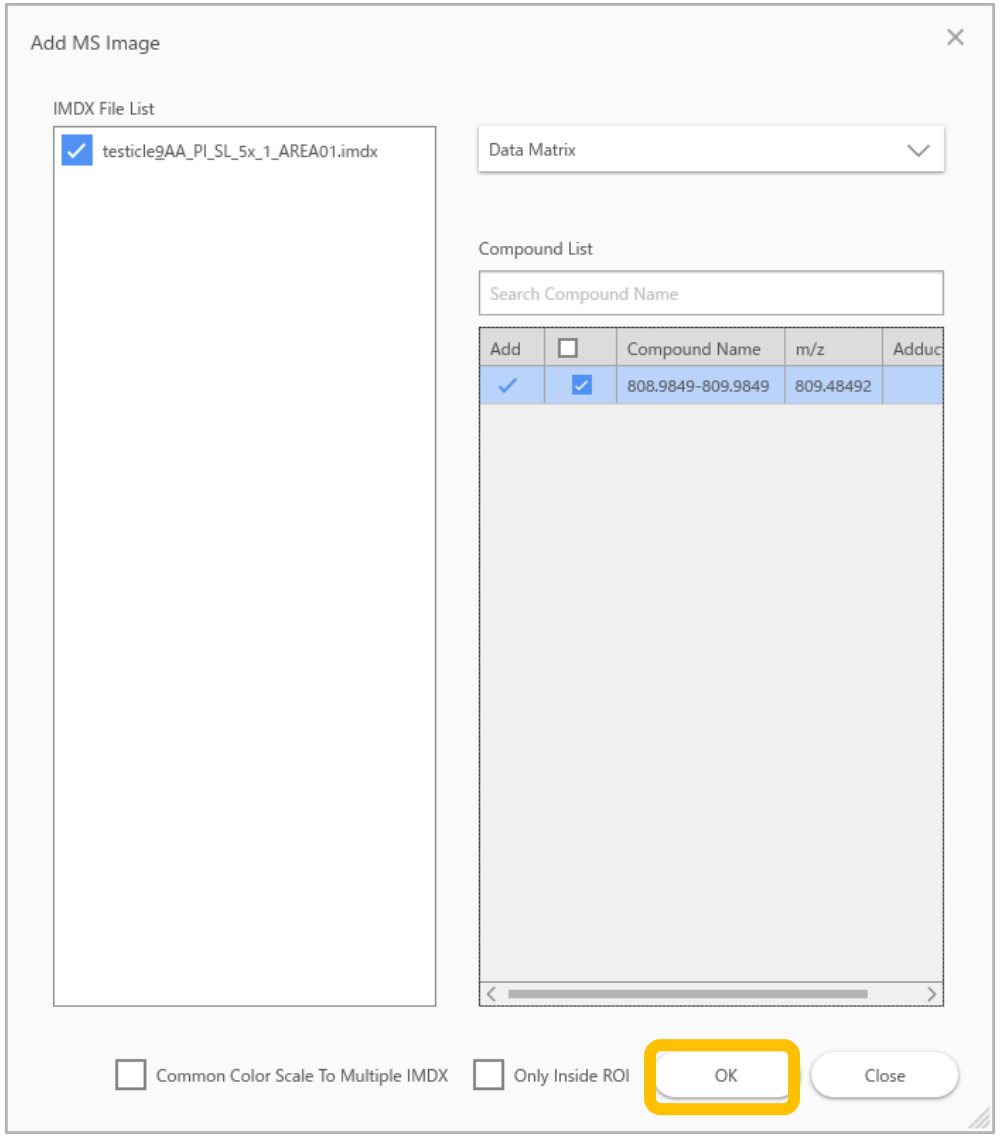
5.2 Calculations window



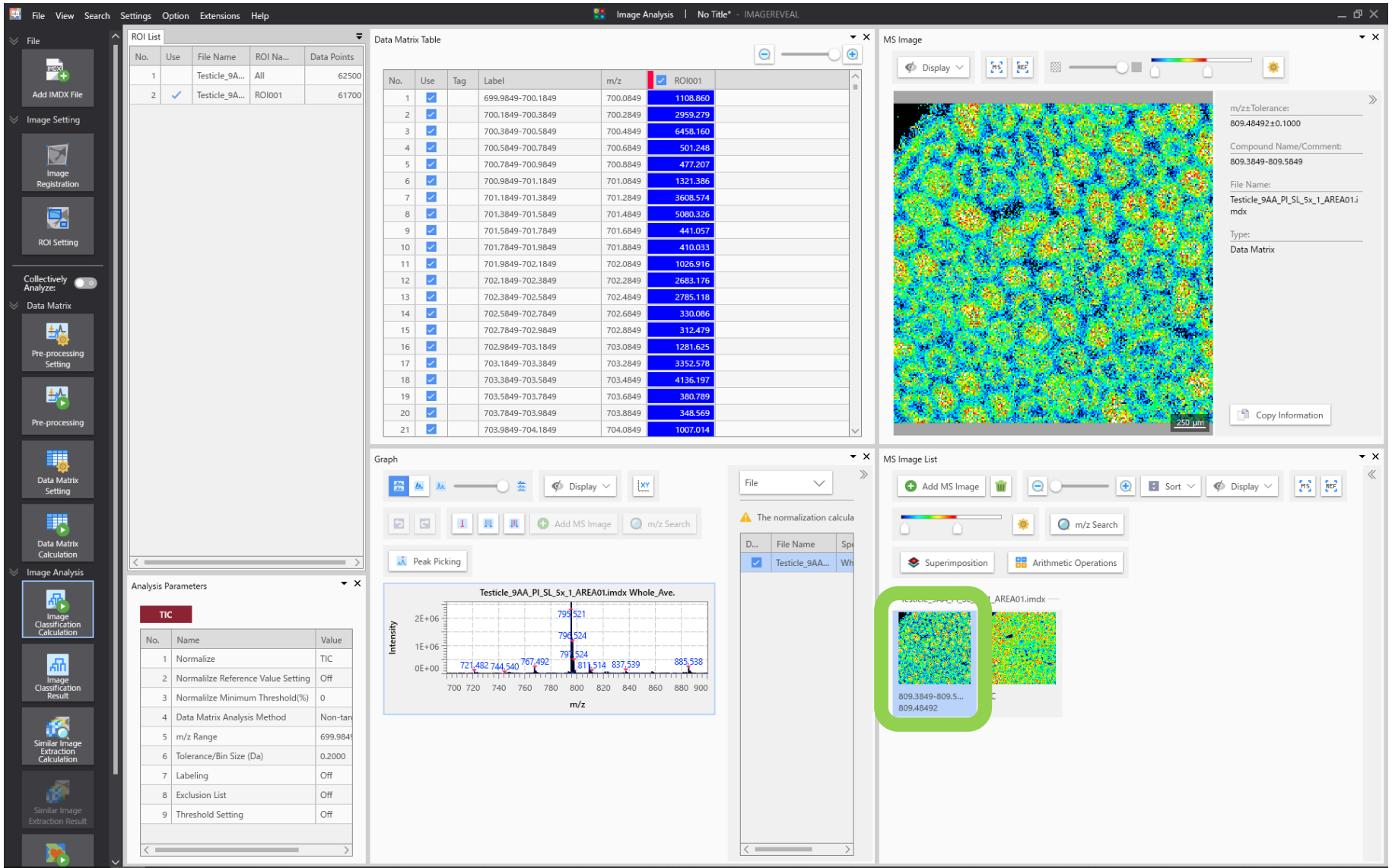
5.3 Image classification results



5.4 Add an MS image to the main screen

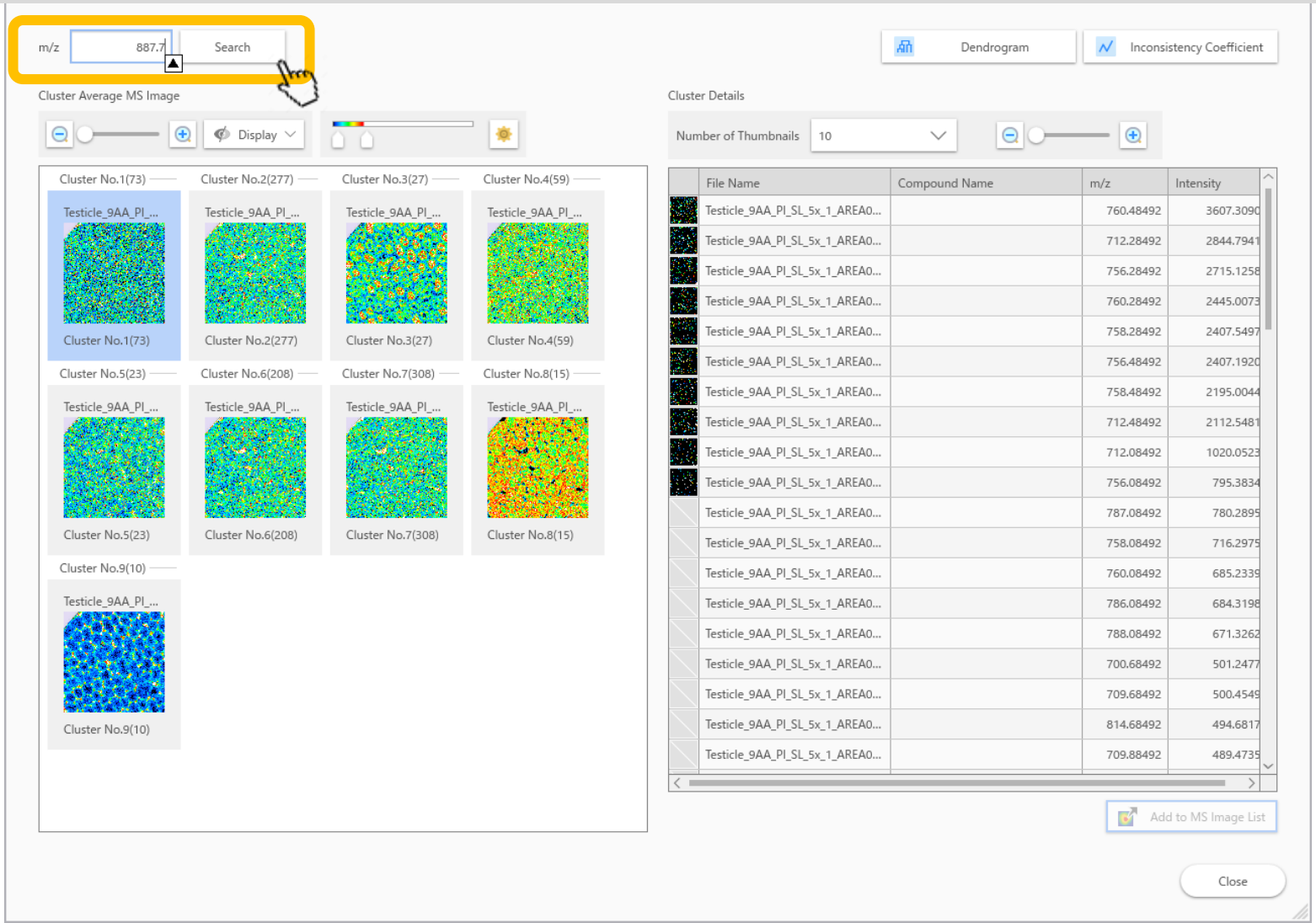


5.5 An MS image from the cluster is added

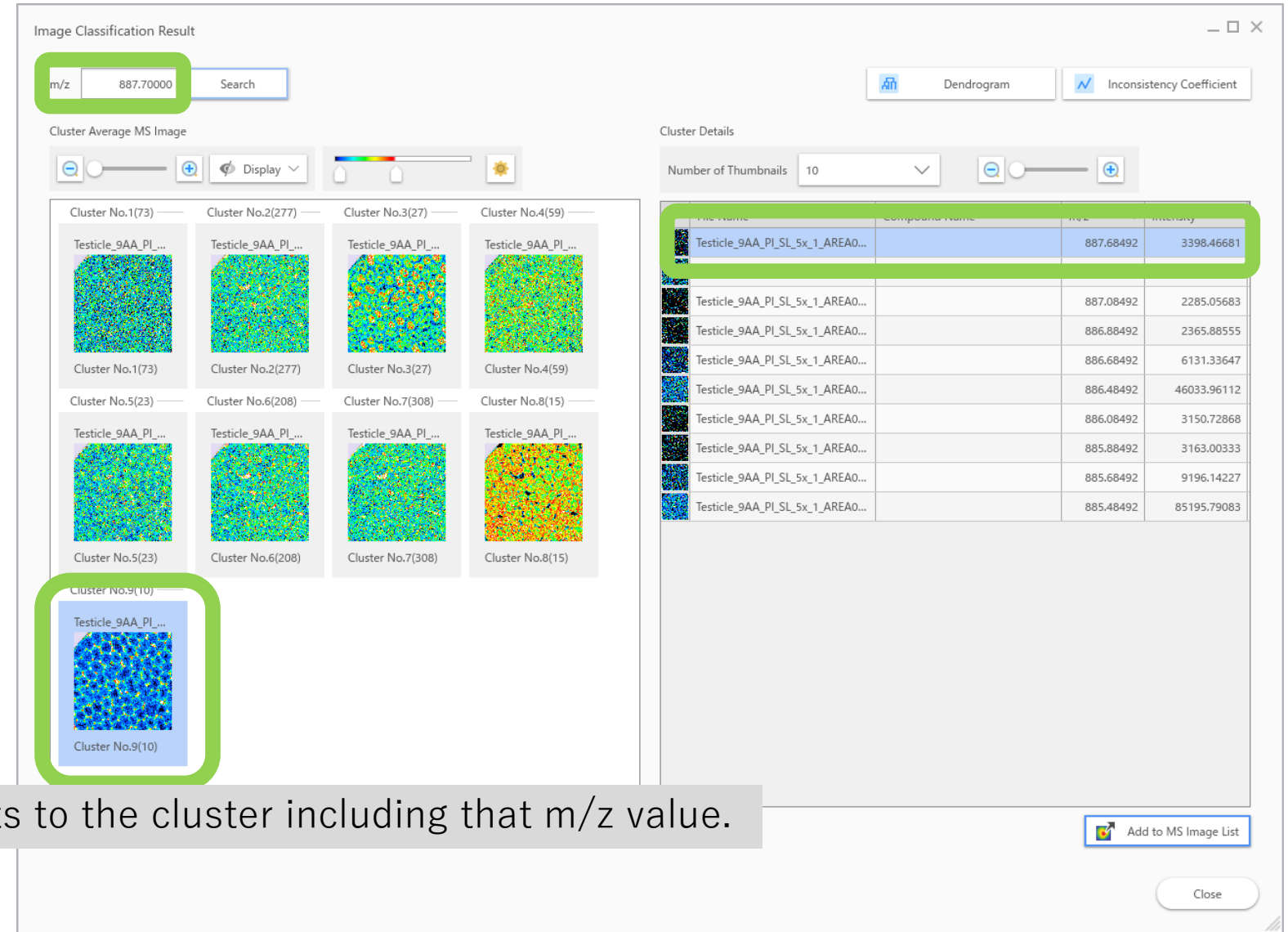


5.6 Search m/z in the image classification

It is possible to search for a particular m/z value to see which clusters it is included in.



5.7 Search result in the image classification



The focus shifts to the cluster including that m/z value.