

Find components that  
differ between regions

Example

Extract components “A”, “B”  
and “C”, which differ in  
intensity between regions

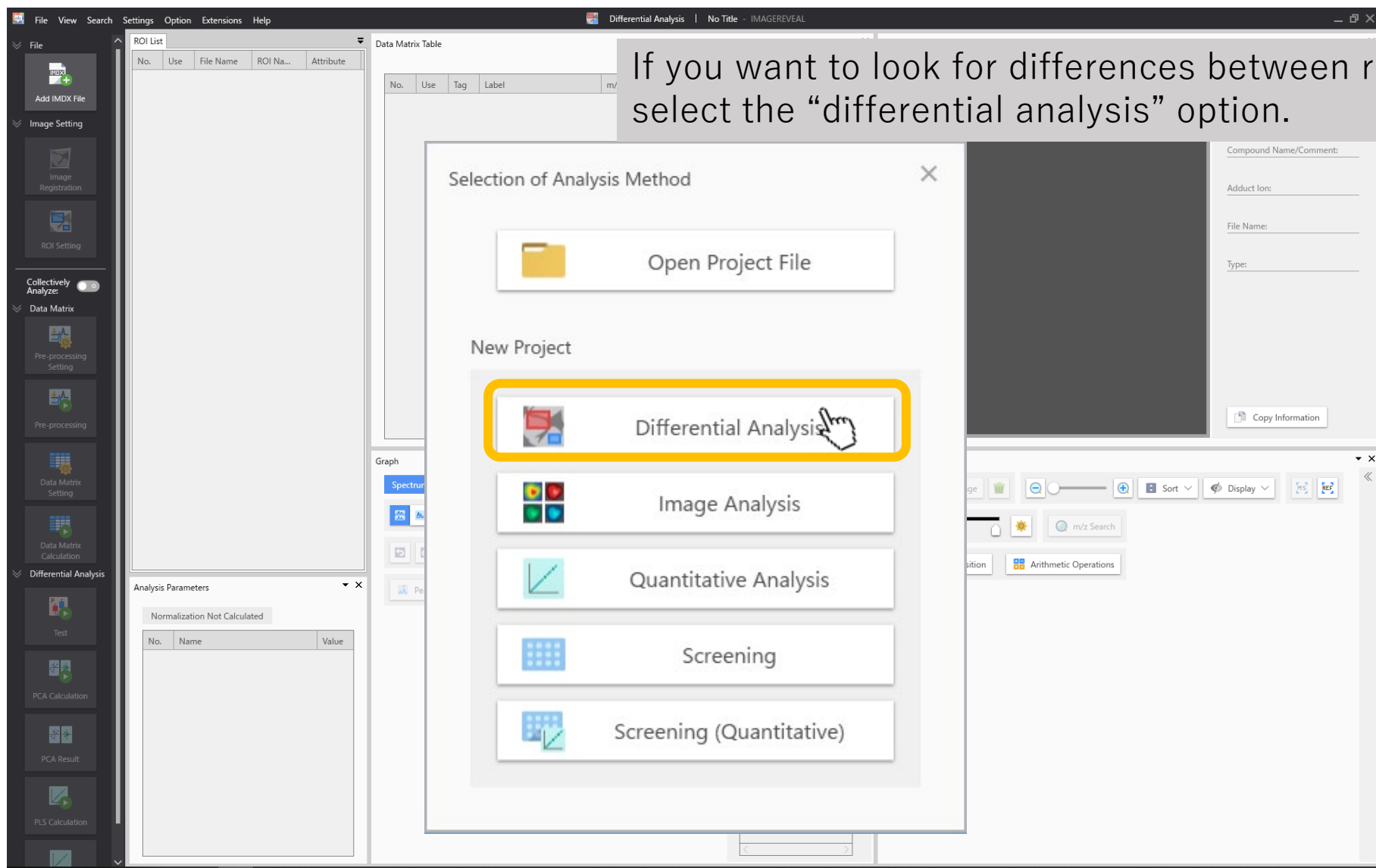
# Steps

1. ROI settings for “A”, “B” and “C”
2. Data matrix table calculations
3. Testing
4. PCA
5. PLS

# Steps

1. ROI settings for “A”, “B” and “C”
2. Data matrix table calculations
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# 1.1 Select “Differential analysis”



# 1.2 Add data file (.imdx)

The screenshot displays the IMAGEREVEAL software interface. The 'Add IMDX File' button in the left sidebar is highlighted with a yellow box, and a hand cursor is pointing at it. A text box overlay reads 'Read in a data file (.imdx format)'. The interface includes a menu bar (File, View, Search, Settings, Option, Extensions, Help), a toolbar, and several panels: ROI List, Data Matrix Table, MS Image, Graph, and MS Image List. The Data Matrix Table panel shows a table with columns: No., Use, Tag, Label, m/z, Formula, Adduct Ion, Matrix, and Polarity. The MS Image panel shows a large dark area for the image and a sidebar with fields for m/z Tolerance, Compound Name/Comment, Adduct Ion, File Name, and Type. The Graph panel shows a 'Spectrum' plot and a 'Box Plot' plot. The MS Image List panel shows a list of images and buttons for 'Add MS Image', 'Sort', 'Display', 'm/z Search', 'Superimposition', and 'Arithmetic Operations'.

Read in a data file (.imdx format)

# 1.3 ROI settings

Apply settings for the region of interest (ROI)

The screenshot displays the IMAGEREVEAL software interface with the following components:







- Left Panel:** A vertical toolbar with icons for File, Image Setting, Image Registration, ROI Setting (highlighted with a yellow box and a hand cursor), Collectively Analyze, Data Matrix, Pre-processing Setting, Pre-processing, Data Matrix Setting, Data Matrix Calculation, Differential Analysis, Test, PCA Calculation, PCA Result, and PLS Calculation.
- ROI List:** A table with columns: No., Use, File Name, ROI Na..., and Attribute. It contains one entry: No. 1, Use (checkbox), File Name: Testicle\_9A..., ROI Na..., and Attribute: Group A.
- Data Matrix Table:** A table with columns: No., Use, Tag, Label, m/z, Formula, Adduct Ion, Matrix, and Polarity. It is currently empty.
- MS Image:** A large panel showing a color-coded mass image. A text box on the right contains: Compound Name/Comment: TIC, File Name: Testicle\_9AA\_PL\_SL\_5x\_1\_AREA01.i, Type: TIC, and a Copy Information button.
- Graph:** A panel with tabs for Spectrum and Box Plot. The Spectrum tab is active, showing a mass spectrum plot titled "Testicle\_9AA\_PL\_SL\_5x\_1\_AREA01.i Whole\_Ave." with peaks labeled at m/z 721, 482, 744, 540, 767, 492, 795, 521, 795, 524, 795, 524, 811, 514, 837, 539, and 885, 538.
- MS Image List:** A panel showing a list of MS images with a thumbnail of the selected image and a TIC label.

# 1.4 ROI settings

ROI Setting

IMDX File: Testicle\_9AA\_PL\_SL\_5x\_1\_AREA01.imdx

Reference Image: Reference Image 1

ROI Selection Tools:      

Import Export

Brightness Contrast

MS Image Setting

File

MS Image: TIC

MS Image

ROI Display Setting

Transparency

Label ☒ Display

ROIs can be selected as a rectangle, a circle or a polygon.

ROI List

Attribute Setting

No.	Use	File Name	ROI Name	Attribute	Date
1	<input type="checkbox"/>	Testicle_9AA_PL_SL_5x_1...	All	Group A	

OK Cancel



# 1.5 ROI settings

ROI Setting

IMDX File: Testicle\_9AA\_PL\_SL\_5x\_1\_AREA01.imdx

Reference Image: Reference Image 1

Brightness, Contrast, Transparency, Smoothing Filter: None

MS Image Setting: File

MS Image: [Color bar]

ROI Display Setting: Transparency, Label: ☒ Display

ROI List


No.	Use	File Name	ROI Name	Attribute	Date
1	<input type="checkbox"/>	Testicle_9AA_PL_SL_5x_1...	All	Group A	
2	<input checked="" type="checkbox"/>	Testicle_9AA_PL_SL_5x_1...	ROI001	Group A	
3	<input checked="" type="checkbox"/>	Testicle_9AA_PL_SL_5x_1...	ROI002	Group A	
4	<input checked="" type="checkbox"/>	Testicle_9AA_PL_SL_5x_1...	ROI003	Group A	


OK Cancel


# 1.6 ROI settings

Select attributes for each ROI in the “Attributes” column. Attributes can be added or edited. The names of the ROIs can be changed.

ROI List

 Attribute Setting







No.	Use	File Name	ROI Name	Attribute	Date
1	<input type="checkbox"/>	Testicle_9AA_Pi_SL_5x_1...	All	Group A ▾	
2	<input checked="" type="checkbox"/>	Testicle_9AA_Pi_SL_5x_1...	ROI001	Group A ▾	
3	<input checked="" type="checkbox"/>	Testicle_9AA_Pi_SL_5x_1...	ROI002	Group A ▾	
4	<input checked="" type="checkbox"/>	Testicle_9AA_Pi_SL_5x_1...	ROI003	Group A ▾	

## 1.7 ROI settings

ROI List

Attribute Setting

No.	Use	File Name	ROI Name	Attribute	Dat
1	<input type="checkbox"/>	Testicle_9AA_Pi_SL_5x_1...	All	Group A	
2	<input checked="" type="checkbox"/>	Testicle_9AA_Pi_SL_5x_1...	ROI001	Group A	
3	<input checked="" type="checkbox"/>	Testicle_9AA_Pi_SL_5x_1...	ROI002	Group B	
4	<input checked="" type="checkbox"/>	Testicle_9AA_Pi_SL_5x_1...	ROI003	Group A	

Group A

Group A

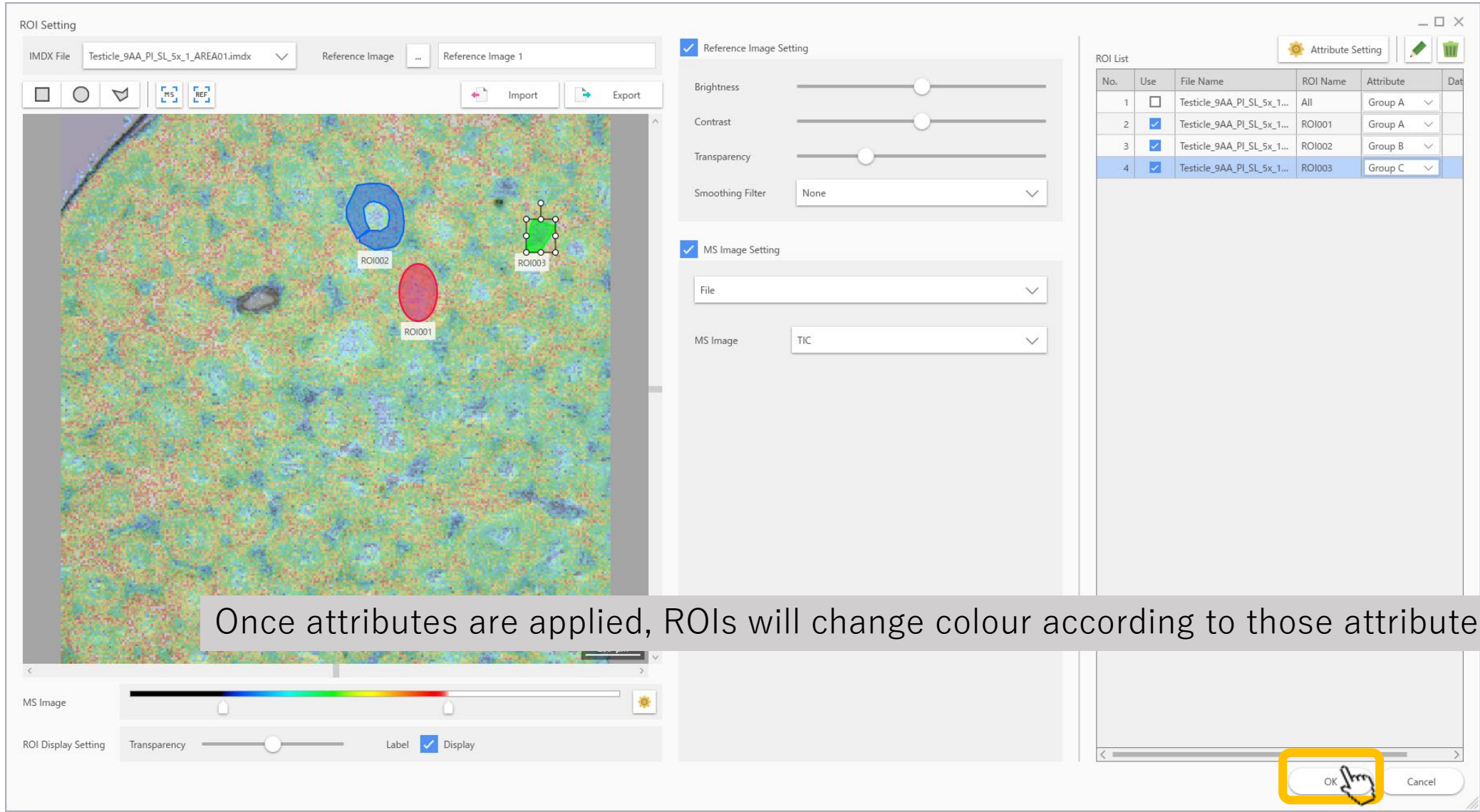
Group B

Group A

Group B

Group C

# 1.8 ROI settings



The screenshot displays the 'ROI Setting' dialog box, which is used for configuring image and ROI settings. The main window shows a color-coded image with three regions of interest (ROIs) labeled ROI001, ROI002, and ROI003. ROI001 is a red oval, ROI002 is a blue irregular shape, and ROI003 is a green square with a grid pattern.

The 'Reference Image Setting' section includes sliders for Brightness, Contrast, and Transparency, and a dropdown for Smoothing Filter (set to None). The 'MS Image Setting' section includes a File dropdown and an MS Image dropdown (set to TIC).

The 'ROI List' table on the right shows the following data:

No.	Use	File Name	ROI Name	Attribute	Date
1	<input type="checkbox"/>	Testicle_9AA_Pi_SL_5x_1...	All	Group A	
2	<input checked="" type="checkbox"/>	Testicle_9AA_Pi_SL_5x_1...	ROI001	Group A	
3	<input checked="" type="checkbox"/>	Testicle_9AA_Pi_SL_5x_1...	ROI002	Group B	
4	<input checked="" type="checkbox"/>	Testicle_9AA_Pi_SL_5x_1...	ROI003	Group C	

At the bottom of the dialog, there is a color bar for the MS Image and a 'Label' checkbox which is checked. The 'OK' button is highlighted with a yellow box and a hand cursor.

Once attributes are applied, ROIs will change colour according to those attributes.

## 2.1 Pre-processing settings

Carry out settings for pre-processing (normalization of signal intensity)

The screenshot displays the IMAGEREVEAL software interface with the following components:

- Left Panel:** A vertical toolbar with icons for File, Image Setting, ROI Setting, Pre-processing Setting (highlighted with a yellow box and a hand cursor), Pre-processing, Data Matrix Setting, Data Matrix Calculation, Differential Analysis, Test, PCA Calculation, PCA Result, and PLS Calculation.
- ROI List:** A table with columns: No., Use, File Name, ROI Name, and Attribute. It contains one entry: No. 1, Use: Testicle\_9AA..., ROI Name: All, Attribute: Group A.
- Data Matrix Table:** A table with columns: No., Use, Tag, Label, m/z, Formula, Adduct Ion, Matrix, and Polarity. It is currently empty.
- MS Image:** A large panel showing a color-coded mass spectrum image. It includes a 'Display' dropdown, a color scale bar, and a 'Copy Information' button. The 'Compound Name/Comment' field shows 'TIC'. The 'File Name' field shows 'Testicle\_9AA\_PLI\_SL\_5x\_1\_AREA01.i.mdx'. The 'Type' field shows 'TIC'.
- Graph:** A panel showing a mass spectrum plot titled 'Testicle\_9AA\_PLI\_SL\_5x\_1\_AREA01.i.mdx Whole\_Ave.'. The x-axis is labeled 'm/z' and ranges from 700 to 900. The y-axis is labeled 'Intensity' and ranges from 0E+00 to 2E+06. The plot shows several peaks, with the most prominent ones labeled with their m/z values: 721, 482, 744, 540, 767, 492, 794, 521, 811, 514, 837, 539, and 885, 538.
- MS Image List:** A panel showing a list of MS images. It includes buttons for 'Add MS Image', 'Sort', 'Display', 'Superimposition', and 'Arithmetic Operations'. The list contains one entry: 'Testicle\_9AA\_PLI...'. Below the list is a small thumbnail of the MS image.

## 2.2 Pre-processing settings

Pre-processing Setting

Normalize None TIC XIC

Import Export + -

No.	Use	m/z	Tolerance
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☐ Reference Value Setting

Minimum Threshold Value (%)

Specified Method ☐ Range ☒ Center  $\pm$  Tolerance

OK Cancel

Set the "Normalize" criteria.  
TIC is generally used.



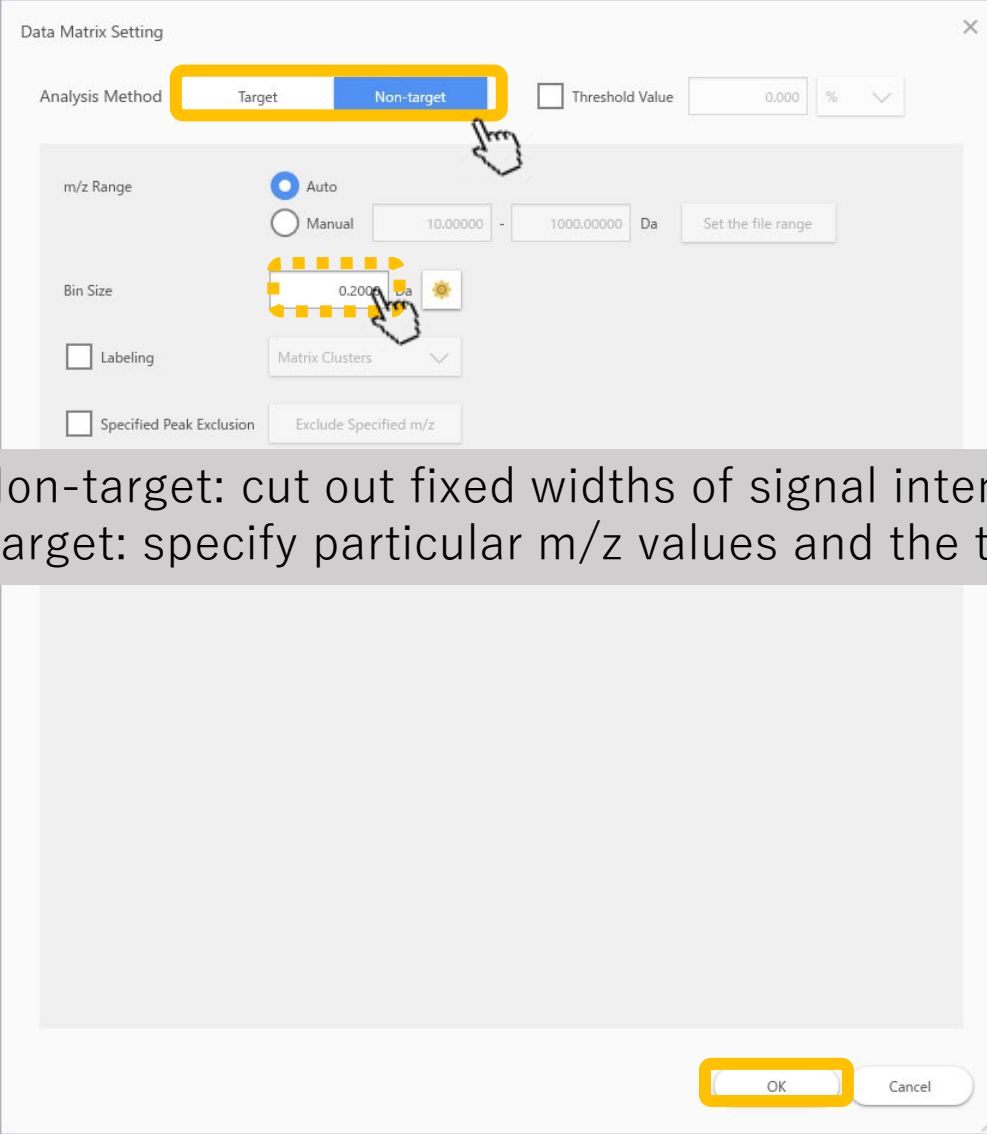
## 2.3 Data matrix settings

The screenshot displays the IMAGEREVEAL software interface, which is used for differential analysis of mass spectrometry data. The interface is divided into several panels:

- Left Panel:** Contains a vertical toolbar with icons for File, Image Setting, ROI Setting, Data Matrix, Pre-processing, and Differential Analysis. The **Data Matrix Setting** icon is highlighted with a yellow box and a hand cursor.
- ROI List:** A table with columns: No., Use, File Name, ROI Na..., and Attribute. It contains one entry: No. 1, Use: Testicle\_9A..., ROI Na...: All, Attribute: Group A.
- Data Matrix Table:** A table with columns: No., Use, Tag, Label, m/z, Formula, Adduct Ion, Matrix, and Polarity. It is currently empty.
- MS Image:** A large panel showing a color-coded mass image. The title bar indicates "MS Image". The image shows a complex pattern of colors (red, yellow, green, blue) representing different mass-to-charge ratios. The title bar also shows "Display" and "m/z" search options. The right side of the panel displays metadata: Compound Name/Comment: TIC, File Name: Testicle\_9AA\_PL\_SL\_5x\_1\_AREA01.i.mdx, Type: TIC, and a "Copy Information" button.
- MS Image List:** A panel showing a list of MS images. It includes buttons for "Add MS Image", "m/z Search", "Superimposition", and "Arithmetic Operations". A small thumbnail of the MS image is shown.
- Analysis Parameters:** A panel with a "Normalization Not Calculated" status and a table with columns: No., Name, and Value. It is currently empty.
- Mass Spectrum Plot:** A plot titled "Testicle\_9AA\_PL\_SL\_5x\_1\_AREA01.i.mdx Whole\_Ave." showing Intensity vs. m/z. The x-axis ranges from 700 to 900 m/z, and the y-axis ranges from 0E+00 to 2E+06. Several peaks are labeled with their m/z values: 721.482, 744.540, 767.492, 795.521, 795.524, 795.524, 811.514, 837.539, and 885.538.

A semi-transparent text box with the text "Apply settings to the target m/z" is overlaid on the Data Matrix Table and MS Image List panels.

## 2.4 Data matrix settings



The screenshot shows the 'Data Matrix Setting' dialog box. The 'Analysis Method' is set to 'Non-target', which is highlighted with a yellow rectangle and a hand cursor. The 'm/z Range' is set to 'Auto'. The 'Bin Size' is set to '0.2000 Da', which is highlighted with a yellow dashed rectangle and a hand cursor. The 'Threshold Value' is set to '0.000 %'. The 'Labeling' checkbox is unchecked. The 'Specified Peak Exclusion' checkbox is unchecked. The 'Matrix Clusters' dropdown is set to 'Matrix Clusters'. The 'OK' button is highlighted with a yellow rectangle.

Data Matrix Setting

Analysis Method: Target Non-target

Threshold Value: 0.000 %

m/z Range: Auto Manual 10.00000 - 1000.00000 Da Set the file range

Bin Size: 0.2000 Da

Labeling: [ ]

Specified Peak Exclusion: [ ] Exclude Specified m/z

Matrix Clusters

OK Cancel

Non-target: cut out fixed widths of signal intensity from the spectrum.  
Target: specify particular m/z values and the tolerance width.



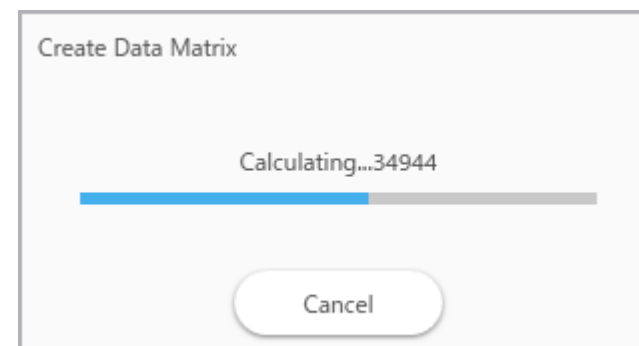
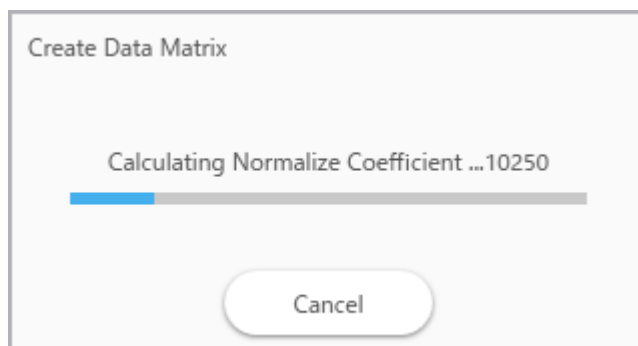
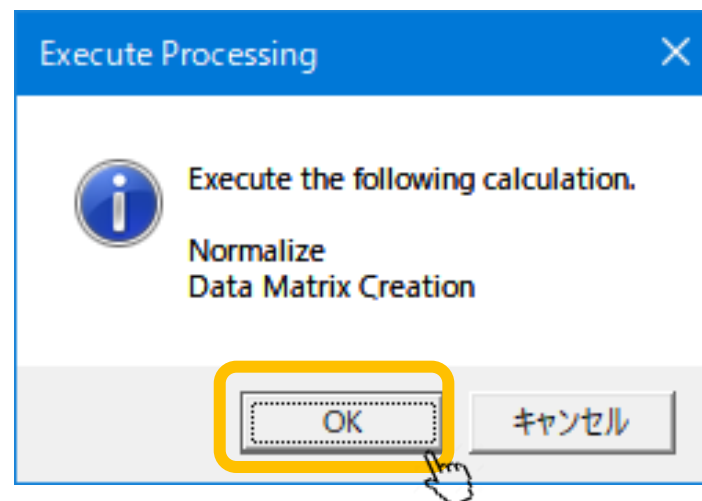
## 2.5 Data matrix calculations

The screenshot displays the IMAGEREVEAL software interface with several panels and a central dialog box.

- Left Panel:** A vertical toolbar with icons for File, Image Setting, ROI Setting, Data Matrix, and other functions. The **Data Matrix Calculation** icon is highlighted with a yellow box and a hand cursor.
- ROI List:** A table with columns: No., Use, File Name, ROI Na..., Attribute. It contains one row: 1, Testicle\_9A..., All, Group A.
- Data Matrix Table:** A table with columns: No., Use, Tag, Label, m/z, Formula, Adduct Ion, Matrix, Polarity. It is currently empty.
- Execute Processing Dialog:** A central dialog box titled "Execute Processing" with a blue header. It contains an information icon and the text "Execute the following calculation. Normalize Data Matrix Creation". The **OK** button is highlighted with a yellow box and a hand cursor.
- MS Image:** A large panel on the right showing a color-coded mass spectrum image. It includes a "Compound Name/Comment" field with "TIC" and a "File Name" field with "Testicle\_9AA\_PL\_SL\_5x\_1\_AREA01.i.mdx".
- MS Image List:** A panel at the bottom right showing a list of MS images, including "Testicle\_9AA\_PL..." and "TIC".
- Graph:** A panel at the bottom center showing a mass spectrum plot titled "Testicle\_9AA\_PL\_SL\_5x\_1\_AREA01.mdx Whole\_Ave.". The x-axis is labeled "m/z" and ranges from 700 to 900. The y-axis is labeled "Intensity" and ranges from 0E+00 to 2E+06. Several peaks are labeled with their m/z values: 721.482, 744.540, 767.492, 795.521, 795.524, 795.524, 811.514, 837.539, and 885.538.

Carry out data matrix calculations.

## 2.6 Running calculations



If pre-processing calculations have not yet been carried out, they will be run here at the same time. If there are a large number of target compounds, the calculations will take longer.

## 2.7 Data matrix calculations are complete

The screenshot displays the IMAGEREVEAL software interface with the following components:

- ROI List:** A table with 4 rows of ROIs.
- Data Matrix Table:** A table with 20 rows of data points, each with a label, m/z, and three ROI values. A green box highlights this table.
- MS Image:** A large heatmap visualization of the data matrix.
- Graph:** A section for plotting data, currently showing a spectrum plot.
- Analysis Parameters:** A table of parameters for the analysis, including normalization and threshold settings.
- MS Image List:** A list of MS images, currently showing the TIC image.

**Data Matrix Table:**

No.	Use	Tag	Label	m/z	ROI001	ROI002	ROI003
1	<input checked="" type="checkbox"/>		699.9849-700.1849	700.0849	1335.372	955.008	719.154
2	<input checked="" type="checkbox"/>		700.1849-700.3849	700.2849	3233.055	2285.856	4259.140
3	<input checked="" type="checkbox"/>		700.3849-700.5849	700.4849	7135.789	6658.481	6215.483
4	<input checked="" type="checkbox"/>		700.5849-700.7849	700.6849	350.186	557.643	704.661
5	<input checked="" type="checkbox"/>		700.7849-700.9849	700.8849	599.713	535.929	1297.413
6	<input checked="" type="checkbox"/>		700.9849-701.1849	701.0849	1603.896	1003.419	1719.029
7	<input checked="" type="checkbox"/>		701.1849-701.3849	701.2849	3562.864	3135.136	6112.206
8	<input checked="" type="checkbox"/>		701.3849-701.5849	701.4849	4053.940	4716.231	11056.985
9	<input checked="" type="checkbox"/>		701.5849-701.7849	701.6849	364.000	440.763	147.480
10	<input checked="" type="checkbox"/>		701.7849-701.9849	701.8849	547.404	453.994	1172.073
11	<input checked="" type="checkbox"/>		701.9849-702.1849	702.0849	1298.887	1064.758	1399.292
12	<input checked="" type="checkbox"/>		702.1849-702.3849	702.2849	2988.290	1353.019	2972.140
13	<input checked="" type="checkbox"/>		702.3849-702.5849	702.4849	2129.094	2368.437	5835.236
14	<input checked="" type="checkbox"/>		702.5849-702.7849	702.6849	205.491	299.329	127.194
15	<input checked="" type="checkbox"/>		702.7849-702.9849	702.8849	254.150	323.080	207.405
16	<input checked="" type="checkbox"/>		702.9849-703.1849	703.0849	1143.333	1304.598	1899.105
17	<input checked="" type="checkbox"/>		703.1849-703.3849	703.2849	2979.481	2536.971	3065.977
18	<input checked="" type="checkbox"/>		703.3849-703.5849	703.4849	4640.529	3625.504	6333.597
19	<input checked="" type="checkbox"/>		703.5849-703.7849	703.6849	383.706	380.487	874.887
20	<input checked="" type="checkbox"/>		703.7849-703.9849	703.8849	476.825	328.199	732.436

**Analysis Parameters:**

No.	Name	Value
1	Normalize	TIC
2	Normalize Reference Value Setting	Off
3	Normalize Minimum Threshold(%)	0
4	Data Matrix Analysis Method	Non-tar
5	m/z Range	699.9849
6	Tolerance/Bin Size (Da)	0.2000
7	Labeling	Off
8	Exclusion List	Off
9	Threshold Setting	Off

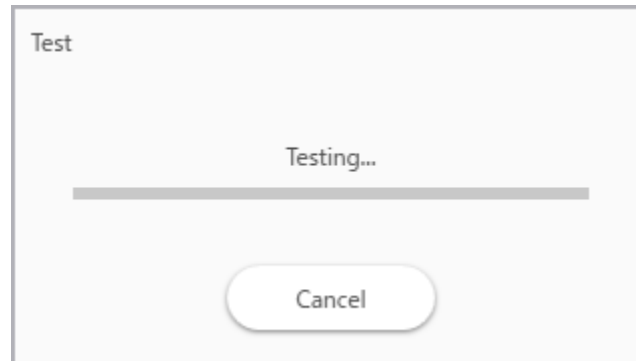
# Steps

1. ROI settings for “A”, “B” and “C”
2. Data matrix table calculations
3. Testing
4. PCA
5. PLS

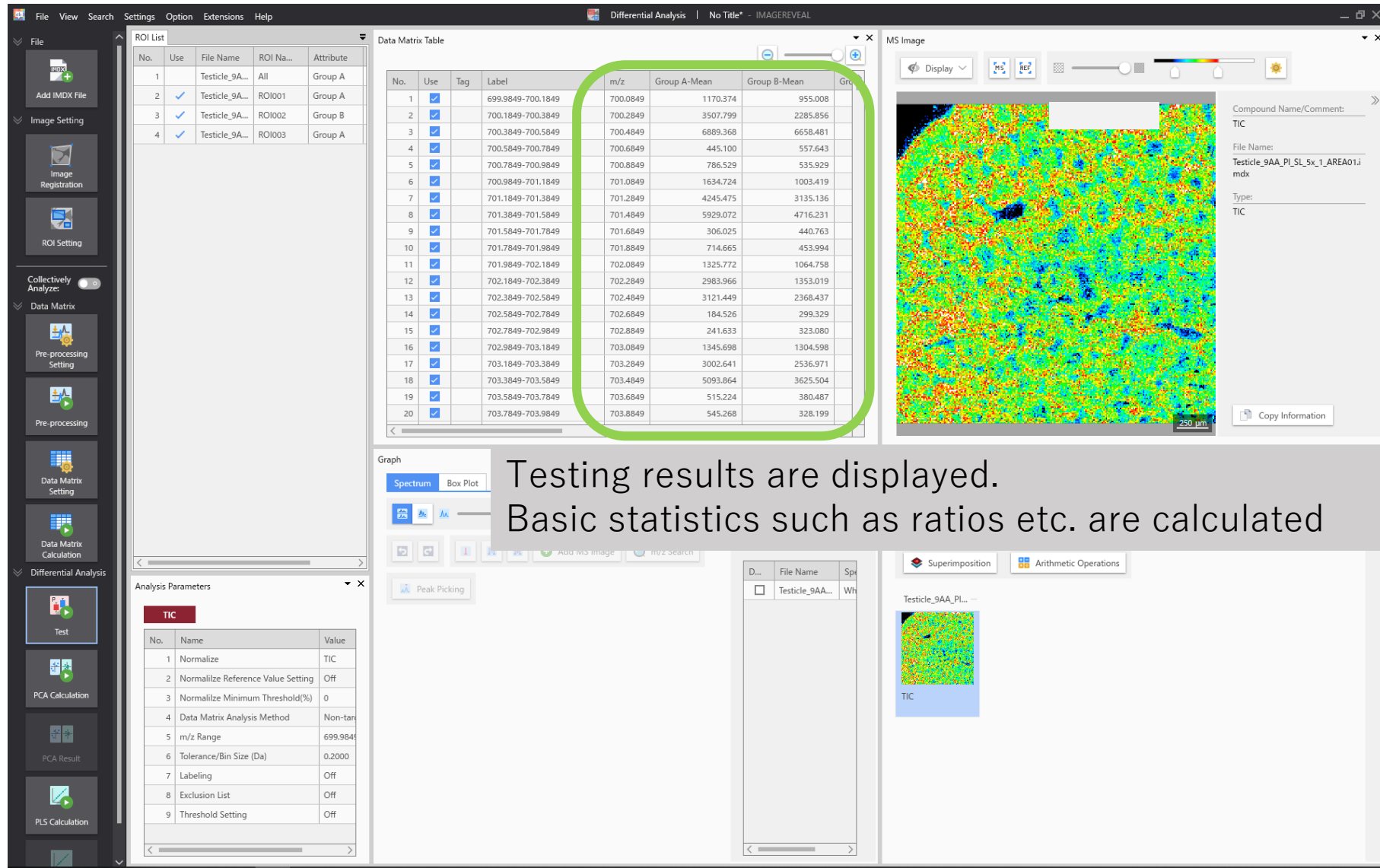
# 3.1 Testing

Carry out testing.  
For 2 groups a t-test is used; for 3 or more ANOVA is used.  
Each measurement point in each ROI is treated as part of the sample.

## 3.2 Dialogue window during calculations



# 3.3 Testing results



## 3.4 Testing results

Data Matrix Table

No.	Use	Tag	Label	G2(Ratio(Grou...	P Value (ANOVA) ▲	ROI001	
928	✓		885.3849-885.5849	0.000	7.419e-125	41856.597	
933	✓		886.3849-886.5849	0.000	1.079e-085	23175.889	
929	✓		885.5849-885.7849	0.000	2.340e-072	4013.716	
938	✓		887.3849-887.5849	0.000	2.249e-060	10379.325	
548	✓		809.3849-809.5849	0.000	8.966e-056	202724.123	
478	✓		795.3849-795.5849	0.000	1.284e-052	922842.629	1
553	✓		810.3849-810.5849	0.000	6.045e-033	97909.708	
934	✓		886.5849-886.7849	0.000	5.981e-031	3494.000	
479	✓		795.5849-795.7849	0.000	1.601e-027	67228.803	
930	✓		885.7849-885.9849	0.000	1.449e-026	1092.085	
688	✓		837.3849-837.5849	0.000	4.410e-025	52410.942	
483	✓		796.3849-796.5849	0.000	2.943e-023	434814.496	
939	✓		887.5849-887.7849	0.000	1.974e-021	1697.613	
67	✓		713.1849-713.3849	0.000	1.885e-017	4514.567	
488	✓		797.3849-797.5849	0.000	7.436e-017	170158.289	
908	✓		881.3849-881.5849	0.000	1.358e-016	35354.833	
935	✓		886.7849-886.9849	0.000	3.249e-013	1287.780	
549	✓		809.5849-809.7849	0.000	2.332e-012	10000.700	

Slide the scroll bar to the right to view the P-values amongst the testing results.



# 3.5 Testing results

Data Matrix Table

No.	Use	Tag	Label	G2(Ratio(Grou...	P Value (ANOVA)	ROI001
928	✓		885.3849-885.5849	0.000	7.419e-125	41856.597
933	✓		886.3849-886.5849	0.000	1.079e-085	23175.889
929	✓		885.5849-885.7849	0.000	2.340e-072	4013.716
938	✓		887.3849-887.5849	0.000	2.249e-060	10379.325
548	✓		809.3849-809.5849	0.000	8.966e-056	202724.123
478	✓		795.3849-795.5849	0.000	1.284e-052	922842.629
553	✓		810.3849-810.5849	0.000	6.045e-033	97909.708
934	✓		886.5849-886.7849	0.000	5.981e-031	3494.000
479	✓		795.5849-795.7849	0.000	1.601e-027	67228.803
930	✓		885.7849-885.9849	0.000	1.449e-026	1092.085
688	✓		837.3849-837.5849	0.000	4.410e-025	52410.942
483	✓		796.3849-796.5849	0.000	2.943e-023	434814.496
939	✓		887.5849-887.7849	0.000	1.974e-021	1697.613
				0.000	1.885e-017	4514.567
				0.000	7.436e-017	170158.289
				0.000	1.358e-016	35354.833
				0.000	1.936e-016	2058.826
				0.000	9.833e-015	1970.228
				0.000	3.249e-013	1287.780
				0.000	3.662e-013	10885.738

Clicking the header row (the top row) to sort the column. Click once more and the column will be sorted in the opposite order. The smaller the P-value, the greater the difference between groups, so we choose a smaller one.

## 3.6 Right-click → “Add MS Image”

Data Matrix Table

No.	Use	Tag	Label	G2(Ratio(Grou...	P Value (ANOVA)	ROI001
928	✓		885.3849-885.5849	0.000	7.419e-125	41856.597
933	✓		886.3849-886.5849	0.000		
929	✓		885.5849-885.7849	0.000		
938	✓		887.3849-887.5849	0.000		
548	✓		809.3849-809.5849	0.000		
478	✓		795.3849-795.5849	0.000		
553	✓		810.3849-810.5849	0.000		
934	✓		886.5849-886.7849	0.000	3.501e-031	3454.000
479						
930						
688						
483	✓		796.3849-796.5849	0.000	2.943e-023	434814.496
939	✓		887.5849-887.7849	0.000	1.974e-021	1697.613
67	✓		713.1849-713.3849	0.000	1.885e-017	4514.567
488	✓		797.3849-797.5849	0.000	7.436e-017	170158.289
908	✓		881.3849-881.5849	0.000	1.358e-016	35354.833
931	✓		885.9849-886.1849	0.000	1.936e-016	2058.826
78	✓		715.3849-715.5849	0.000	9.833e-015	1970.228
935	✓		886.7849-886.9849	0.000	3.249e-013	1287.780
549	✓		809.5849-809.7849	0.000	3.662e-013	10885.738

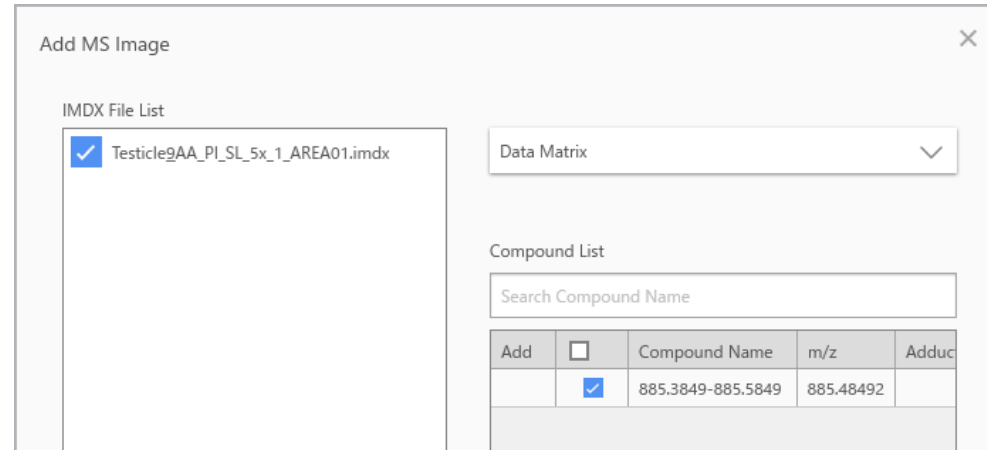
MS Image

Display

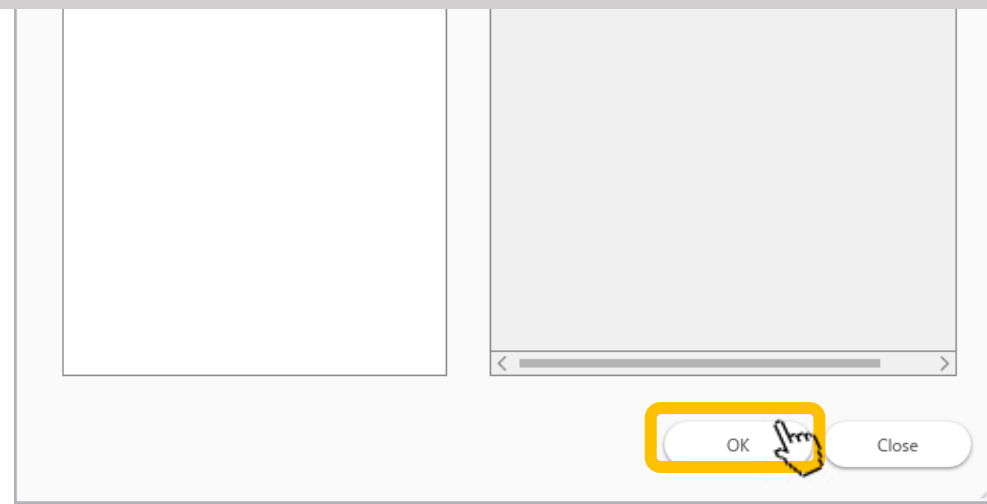
Copy  
Copy All  
m/z Tagging  
ROI Tagging  
Add MS Image  
Set to the Ratio Denominator / Reduction of effect Size  
m/z Search

Selecting the row and right-clicking opens the side-menu.  
Select “Add MS Image” from the side menu.

## 3.7 Select the data file and click “OK”



The “Add MS Image” dialogue window opens.  
If multiple data files are read in, select here which data files images should be added.  
(In this example, there is only one imdx file.)



# 3.8 The MS image is added

The MS image (m/z = 885) appears on the bottom right in the list of MS images, and above that in the “MS image” section.

The screenshot displays the IMAGEREVEAL software interface with the following components:

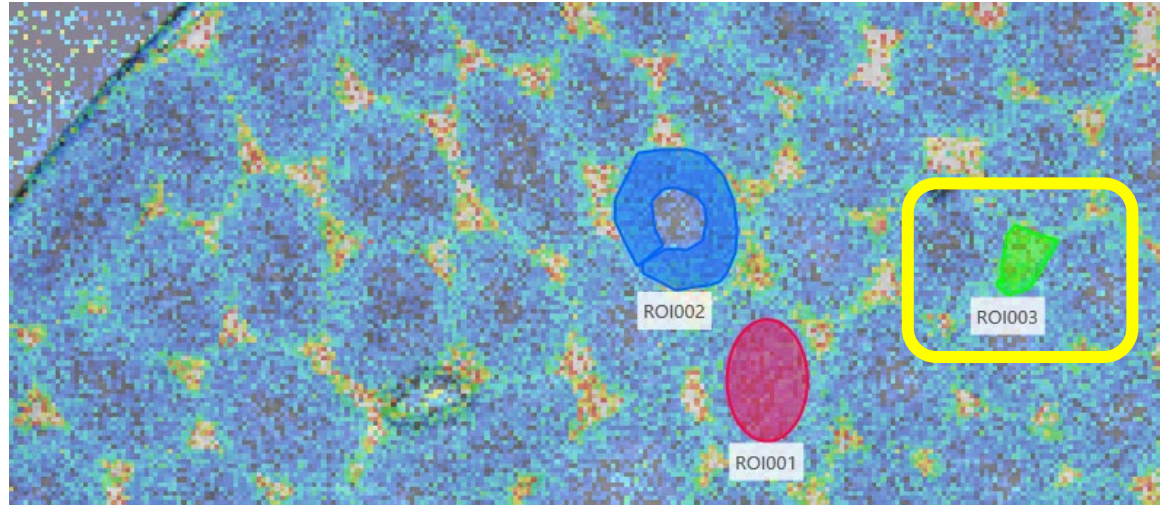
- ROI List:** A table listing four ROIs for 'Testicle\_9A...'.
- Data Matrix Table:** A table showing data for selected ROIs, including m/z values and p-values.
- MS Image:** A large heatmap visualization of the mass spectrum for m/z = 885, highlighted with a green border.
- MS Image List:** A list of MS images, with '1.AREA01.imdx' and '885.3849-885.5... 885.48492' highlighted with a green border.
- Analysis Parameters:** A section for configuring analysis settings, including 'TIC' and 'Normalize'.
- Graph:** A section for displaying spectra and box plots.

No.	Use	File Name	ROI Na...	Attribute
1		Testicle_9A...	All	Group A
2	✓	Testicle_9A...	ROI001	Group A
3	✓	Testicle_9A...	ROI002	Group B
4	✓	Testicle_9A...	ROI003	Group C

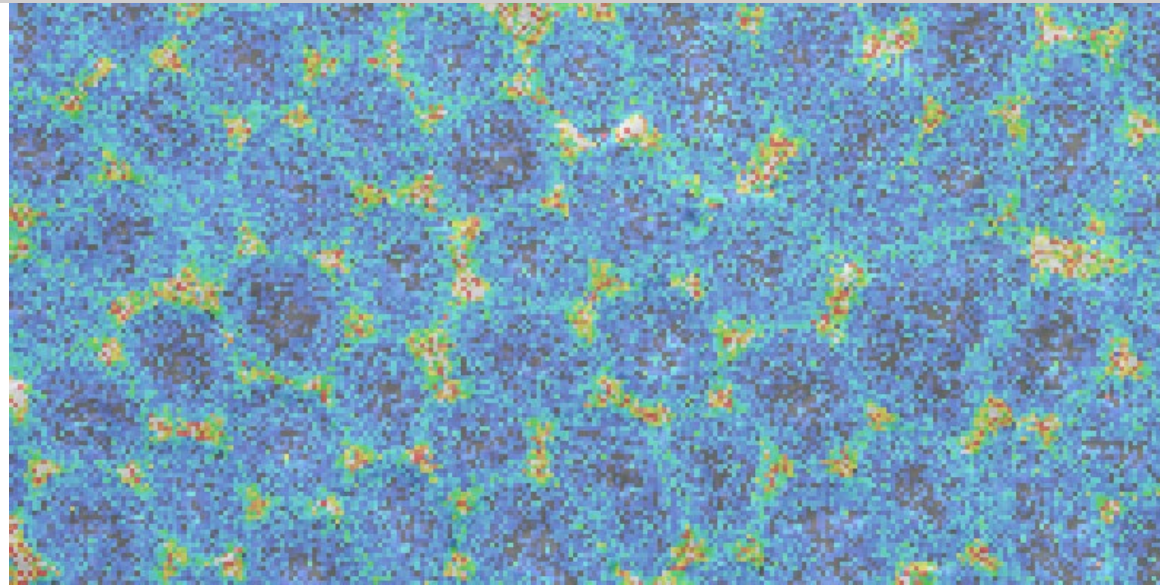
No.	Use	Tag	Label	G2(Ratio(Grou...	P Value (ANOVA) +	ROI001
928	✓		885.3849-885.5849	0.000	7.419e-125	41856.597
933	✓		886.3849-886.5849	0.000	1.079e-085	23175.809
929	✓		885.5849-885.7849	0.000	2.340e-072	4013.716
938	✓		887.3849-887.5849	0.000	2.249e-060	10379.325
548	✓		809.3849-809.5849	0.000	8.966e-056	202724.123

No.	Name	Value
1	Normalize	TIC
2	Normalize Reference Value Setting	Off
3	Normalize Minimum Threshold(%)	0
4	Data Matrix Analysis Method	Non-tar
5	m/z Range	699.9845
6	Tolerance/Bin Size (Da)	0.2000
7	Labeling	Off
8	Exclusion List	Off
9	Threshold Setting	Off

## 3.9 Distinctiveness of ROI3

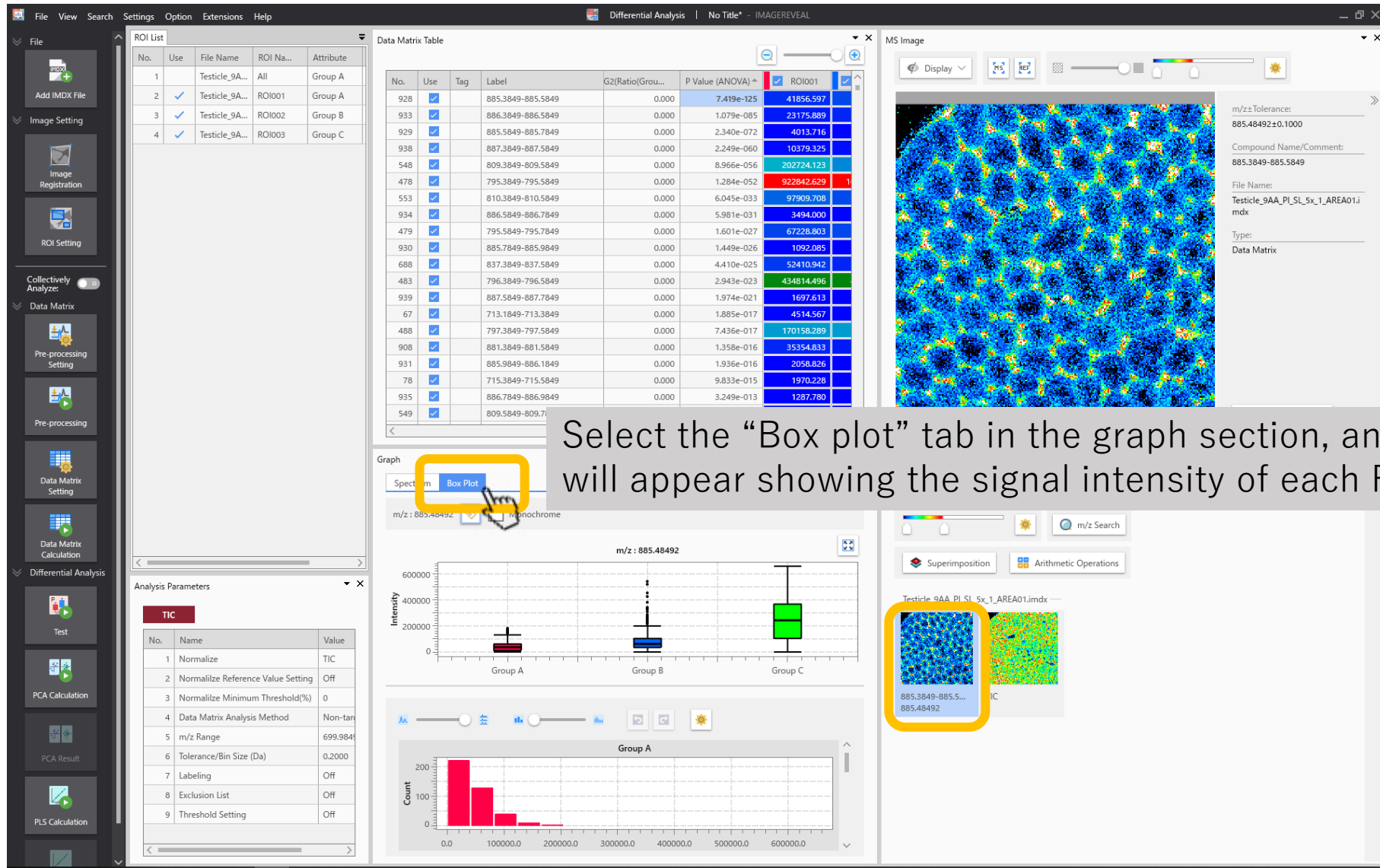


Overlaying the ROIs, we see that ROI3 (in green) is a distinctive region.





# 3.10 Displaying a box plot



### 3.11 Histogram Adjustment

