

Tutorial for EasyPubPlot

Bubble Plot

Step 1: Prepare the Input Data

1. Prepare the input data file

	A	B	C	D	E	F	G
1	Description	Hits	Total	Impact	Raw p	FDR	cpd.hits
2	Arginine biosynthesis	2	14	0.0625	0.014643	0.50226	
3	Primary bile acid biosynthesis	3	46	0.04256	0.022837	0.50226	
4	Pantothenate and CoA biosynthesis	2	20	0.05263	0.029104	0.50226	
5	Citrate cycle (TCA cycle)	2	20	0.06897	0.029104	0.50226	
6	beta-Alanine metabolism	2	21	0.04762	0.031905	0.50226	
7	Pyruvate metabolism	2	23	0.10714	0.037814	0.50226	
8	Phenylalanine, tyrosine and tryptophan biosynthesis	1	4	0	0.053559	0.50226	
9	Alanine, aspartate and glutamate metabolism	2	28	0.1875	0.054236	0.50226	
10	Lysine degradation	2	30	0.07142	0.061406	0.50226	
11	Glyoxylate and dicarboxylate metabolism	2	32	0.11538	0.068887	0.50226	
12	Purine metabolism	3	71	0.04444	0.06906	0.50226	
13	Taurine and hypotaurine metabolism	1	8	0	0.10438	0.63012	
14	Tryptophan metabolism	2	41	0.10256	0.10587	0.63012	
15	Tyrosine metabolism	2	42	0.04651	0.11027	0.63012	
16	Biotin metabolism	1	10	0	0.1288	0.68696	
17	Nicotinate and nicotinamide metabolism	1	15	0.04762	0.18712	0.83507	
18	D-Amino acid metabolism	1	15	0.125	0.18712	0.83507	
19	Histidine metabolism	1	16	0	0.19833	0.83507	
20	Glycerolipid metabolism	1	16	0.04545	0.19833	0.83507	
21	Ubiquinone and other terpenoid-quinone biosynthesis	1	18	0.06667	0.22031	0.88123	
22	Propanoate metabolism	1	22	0	0.26255	0.99188	
23	Pentose phosphate pathway	1	23	0.03333	0.27277	0.99188	

NOTE: COLUMN ORDER NEEDS TO BE IDENTICAL WITH EXAMPLE DATA (IF THE INFORMATION IS UNAVAILABLE, LEAVE IT EMPTY). COLUMN NAMES CAN BE DIFFERENT.

Step 2: Upload the Data

1. Select tab “Bubble Plot”.
2. Select subtab “Data Upload”.
 - Select option “Omics Data” to choose the omics platform (Metabolomics/Transcriptomics)

EASYPUBPLOT INTRODUCTION VOLCANO PLOT HEATMAP SCORES PLOT BOX PLOT DOT PLOT **BUBBLE PLOT** TUTORIALS

[Back to Tutorials](#) [Reset App](#)

Data Upload Plot Dimension & Themes

Points Legend Axis Labels

Axis Limits Axis Breaks Save Plot

Omics Data:

Metabolomics ▼

☐ Adjusted P-value

Upload Pathway Results File:

BROWSE... No file selected

Step 2: Upload the Data

2. Select subtab “Data Upload”.

- Select “Adjusted P-value” (Optional).
- Upload data file.

[Back to Tutorials](#) [Reset App](#)

Data Upload

Plot Dimension & Themes

Points Legend Axis Labels

Axis Limits Axis Breaks Save Plot

Omics Data:

Metabolomics

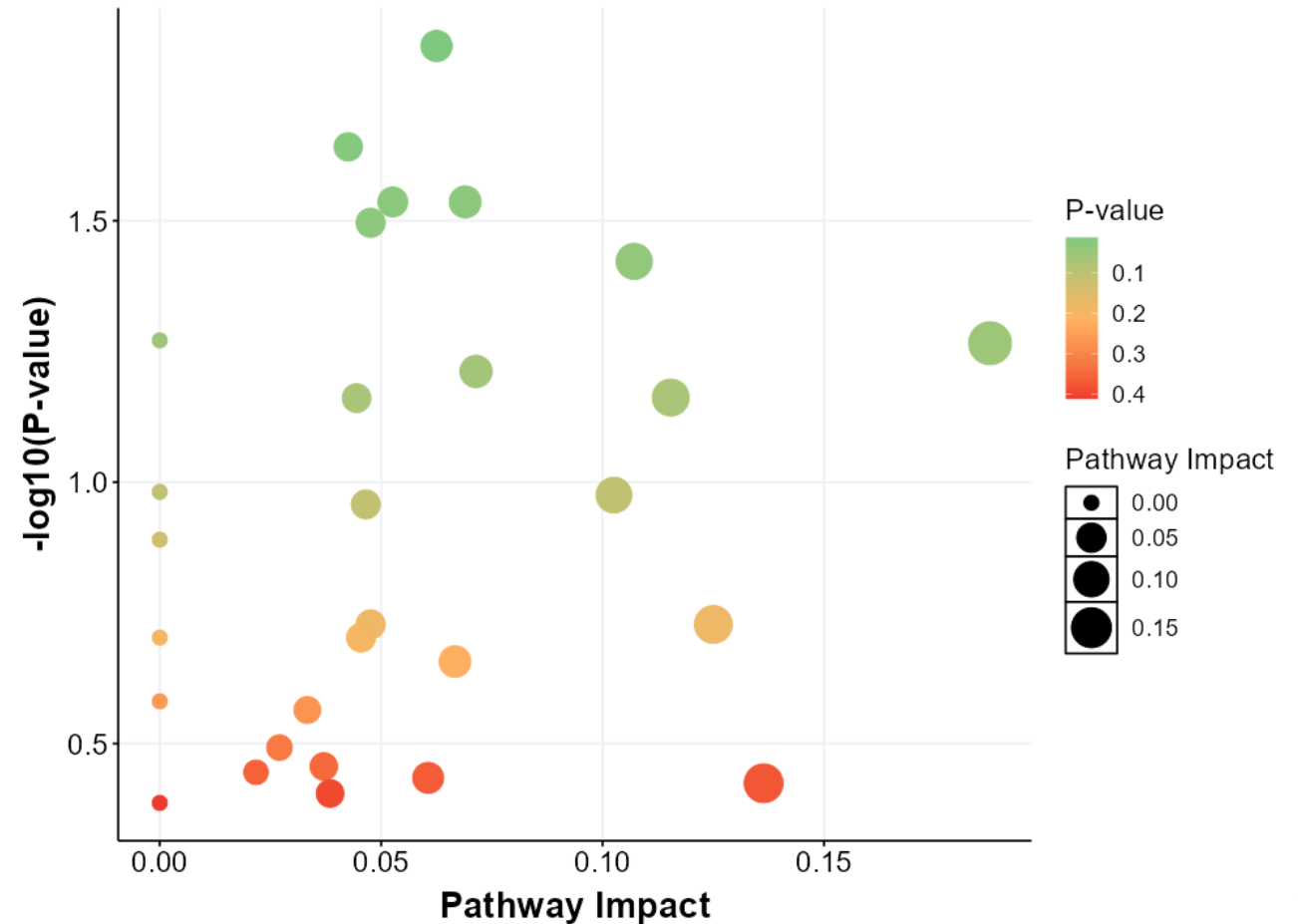
☐ Adjusted P-value

Upload Pathway Results File:

BROWSE...

BubblePlot_DotPlot_ExampleORA_1.csv

Upload complete



Step 3: Modify the Bubble Plot

1. Select subtab “Plot Dimension & Themes”.

- Select options “Width (in pixels)” and “Height (in pixels)” to modify the plot dimension.
- Select option “Plot Theme” to choose the appropriate theme.

[Back to Tutorials](#) [Reset App](#)

[Data Upload](#) **[Plot Dimension & Themes](#)** [Points](#) [Legend](#) [Axis Labels](#)

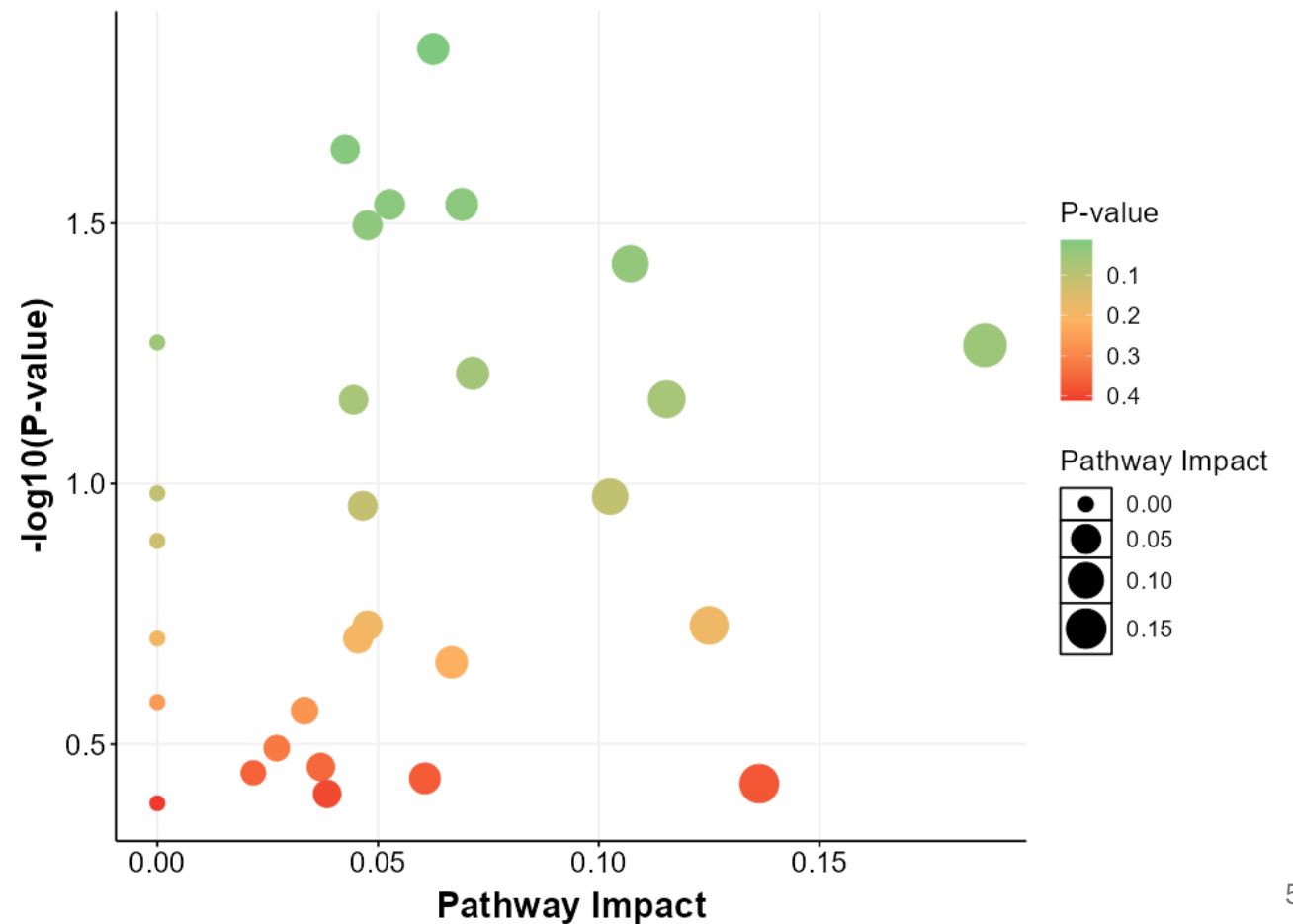
[Axis Limits](#) [Axis Breaks](#) [Save Plot](#)

Width (in pixels):

Height (in pixels):

Plot Theme:

theme_Publication



Step 3: Modify the Bubble Plot

2. Select subtab “Points”.

- Select options “Point Size Scale” to modify the appropriate scale of points.
- Select options “(Adj) P-value Color” to choose the appropriate colors for (Adjusted) P-value of each point.

[Back to Tutorials](#) [Reset App](#)

[Data Upload](#) [Plot Dimension & Themes](#)

[Points](#)

[Legend](#)

[Axis Labels](#)

[Axis Limits](#) [Axis Breaks](#) [Save Plot](#)

Point Size Scale, Small:

4

Point Size Scale, Big:

12

(Adj) P-value Color, Low:

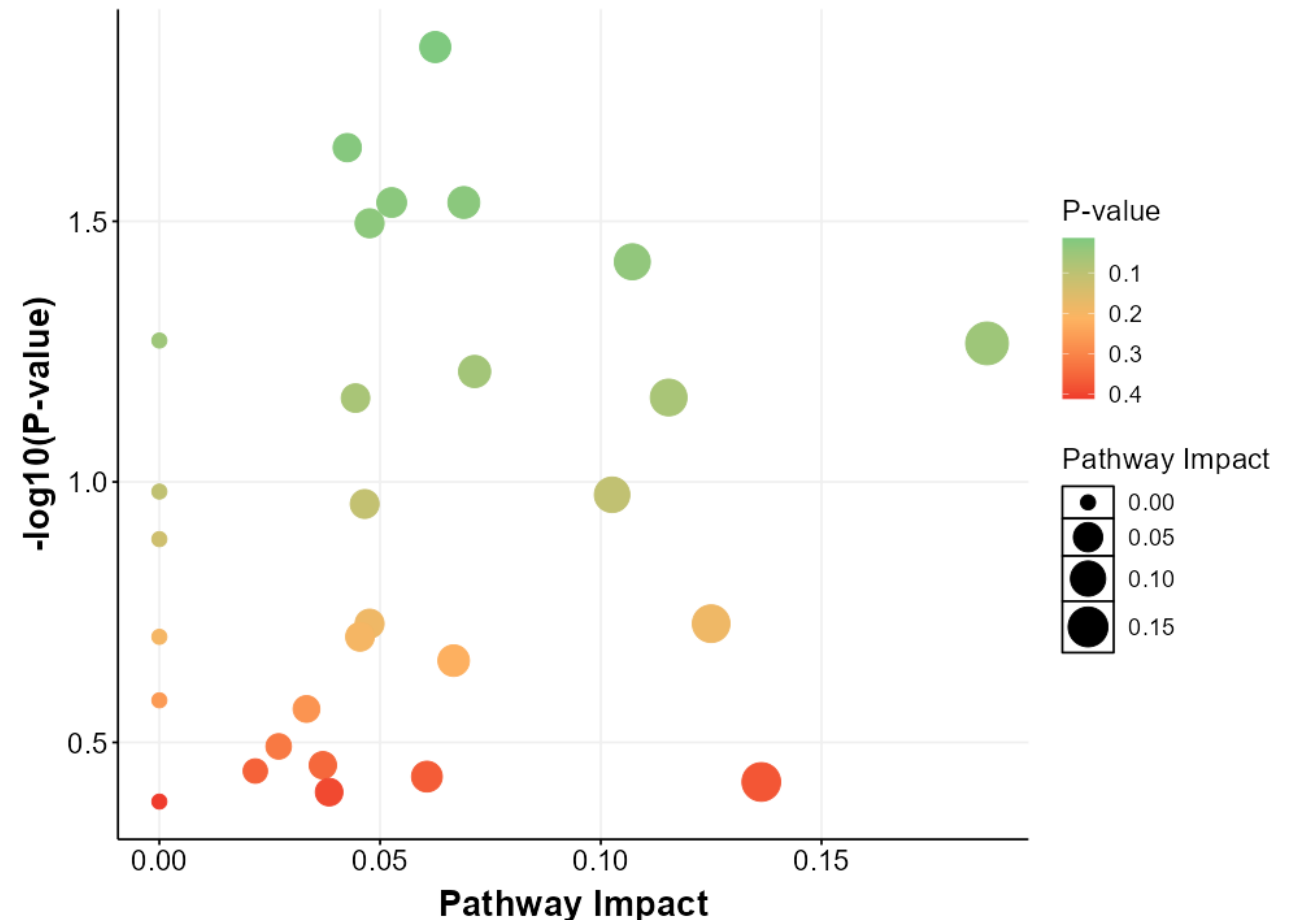
#7FC97F

(Adj) P-value Color, Intermediate:

#FDB462

(Adj) P-value Color, High:

#EF3B2C



Step 3: Modify the Bubble Plot

3. Select subtab “Legend”.

- Select option “Show Legend” to display or not display the legends.
- Select options “Legend Size” to modify the title size, text size and icon size.

[Back to Tutorials](#) [Reset App](#)

[Data Upload](#) [Plot Dimension & Themes](#)

[Points](#) **Legend** [Axis Labels](#)

[Axis Limits](#) [Axis Breaks](#) [Save Plot](#)

☒ Show Legend

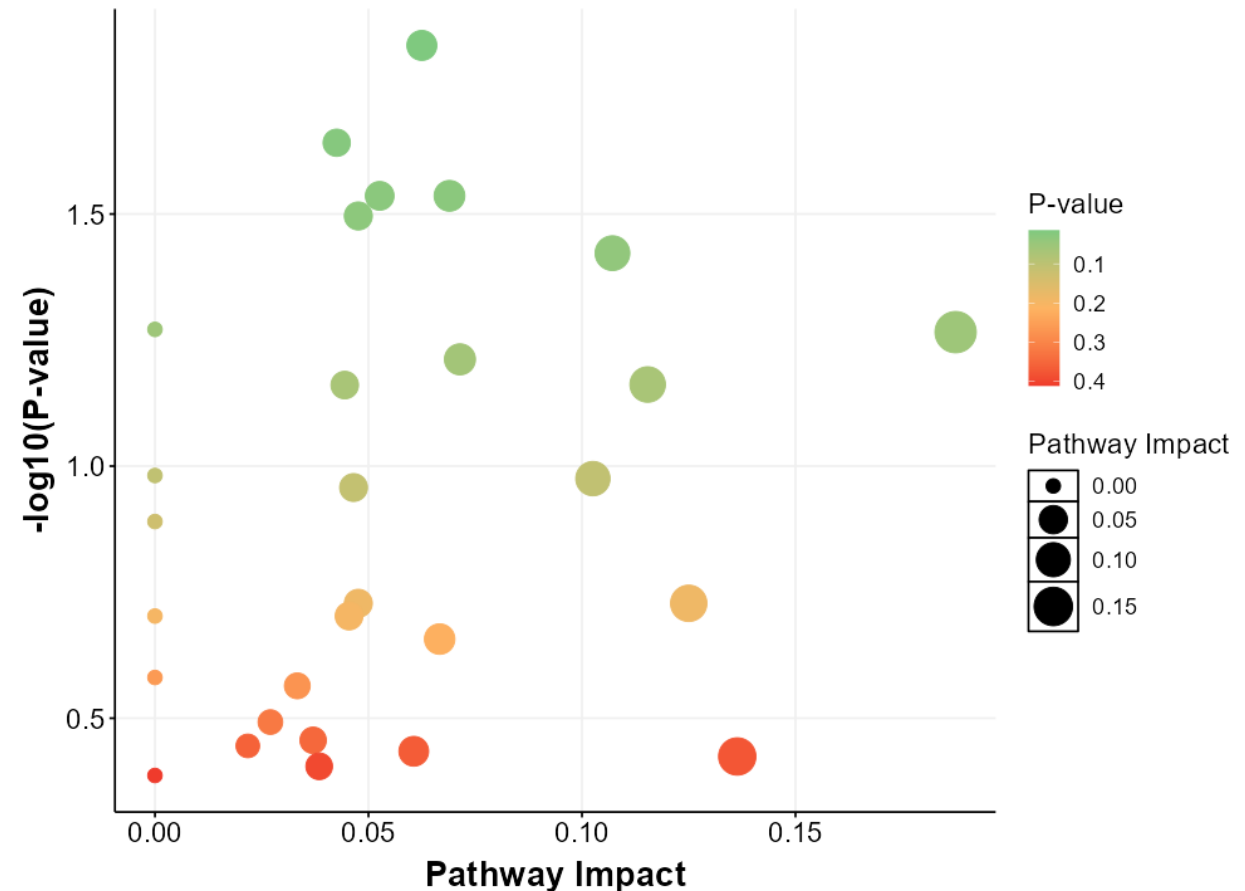
Legend Title Size:

Legend Text Size:

Legend Icon Size:

Color Title:

Point Size Title:



Step 3: Modify the Bubble Plot

3. Select subtab “Legend”.

- Select options “Color Title” and “Point Size Title” to modify the color and point size titles, respectively.

[Back to Tutorials](#) [Reset App](#)

[Data Upload](#) [Plot Dimension & Themes](#)

[Points](#) **Legend** [Axis Labels](#)

[Axis Limits](#) [Axis Breaks](#) [Save Plot](#)

☒ Show Legend

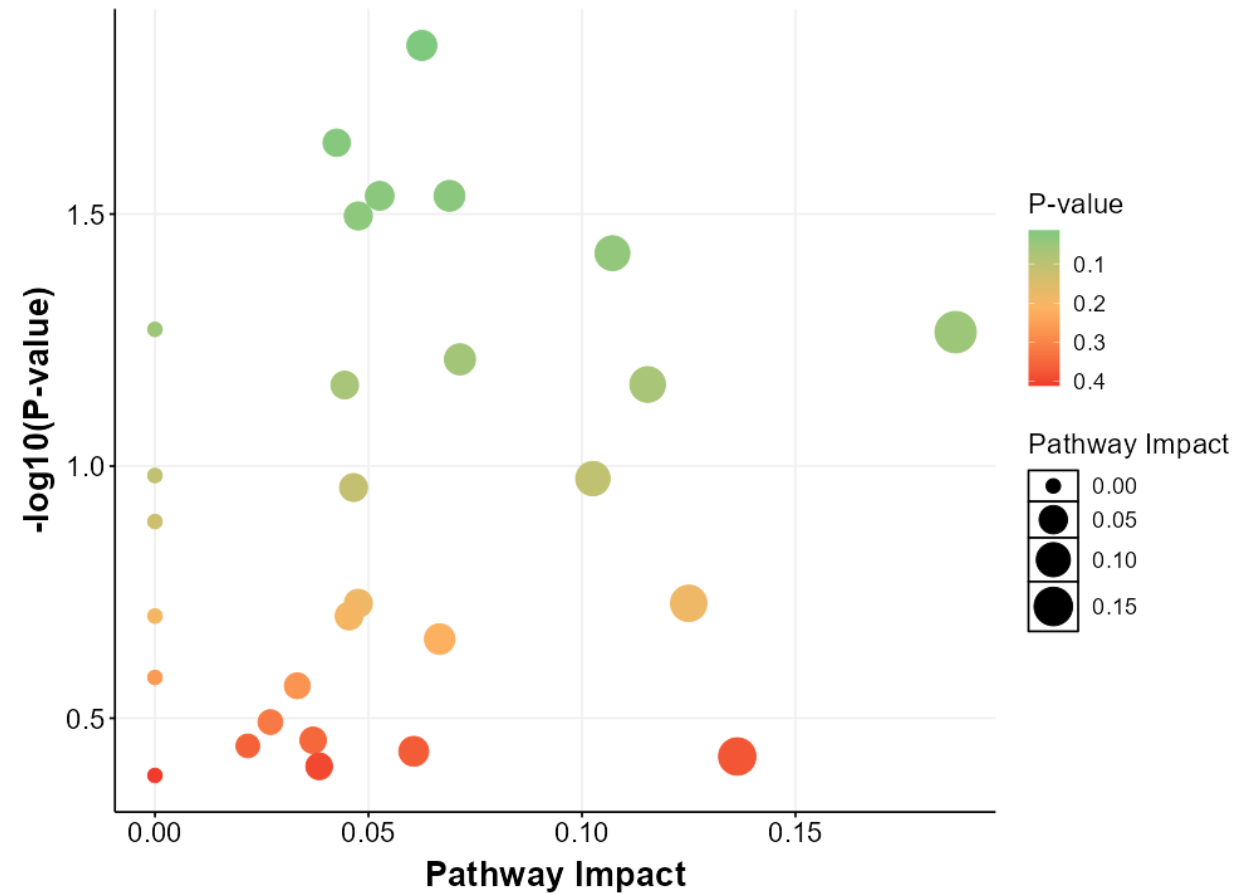
Legend Title Size:

Legend Text Size:

Legend Icon Size:

Color Title:

Point Size Title:



Step 3: Modify the Bubble Plot

4. Select subtab “Axis Labels”.

- Select option “X-axis Label” to modify the appropriate X-axis label.
- Select options “Axis Label Size” and “Axis Bold” to modify the size and bold the X-axis label, respectively.

[Back to Tutorials](#) [Reset App](#)

[Data Upload](#) [Plot Dimension & Themes](#)
[Points](#) [Legend](#) **Axis Labels**
[Axis Limits](#) [Axis Breaks](#) [Save Plot](#)

X-axis Label:

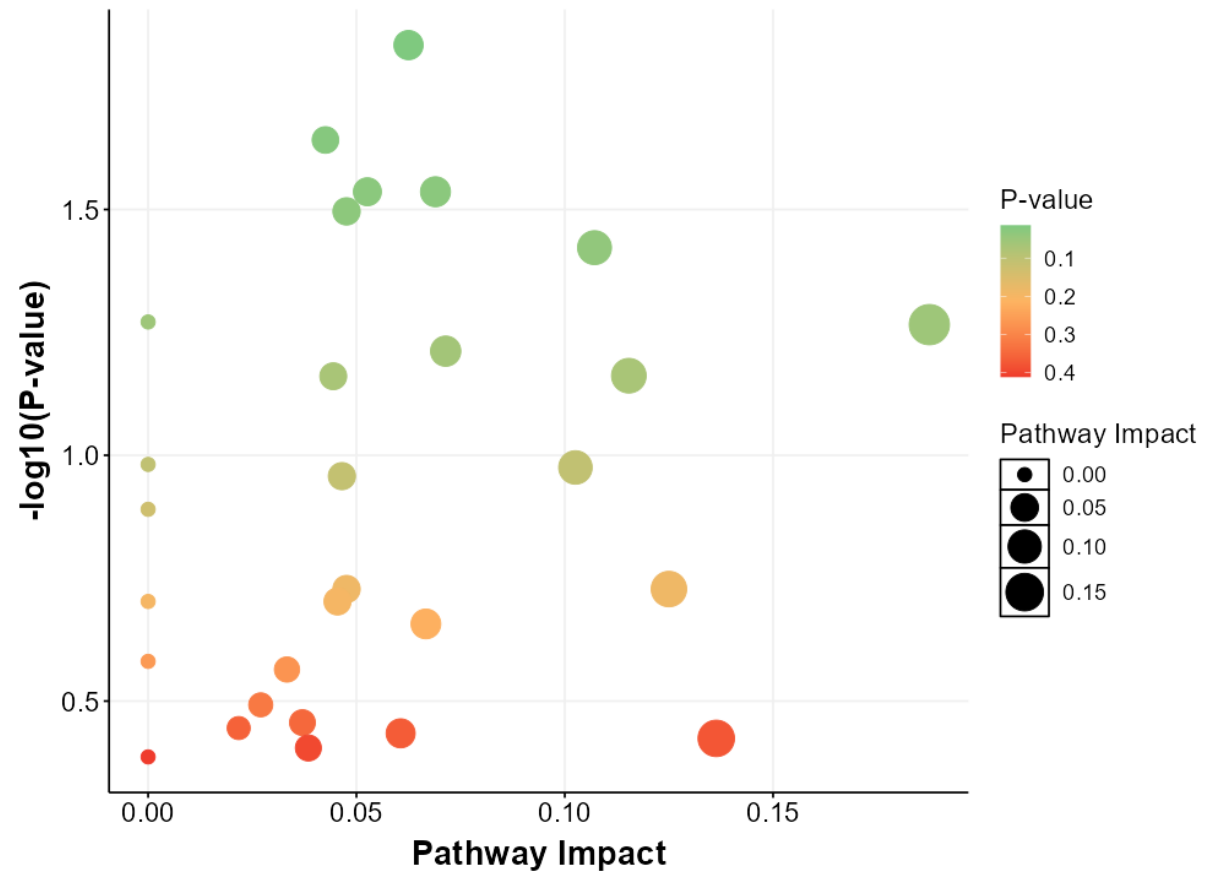
Y-axis Label:

Axis Label Size:

☒ Axis Bold

Tick Label Size:

☐ Tick Bold



Step 3: Modify the Bubble Plot

4. Select subtab “Axis Labels”.

- Select options “Tick Label Size” to modify the size of tick labels.
- Select option “Tick Bold” to bold the tick labels.

[Back to Tutorials](#) [Reset App](#)

Data Upload

Plot Dimension & Themes

Points

Legend

Axis Labels

Axis Limits

Axis Breaks

Save Plot

X-axis Label:

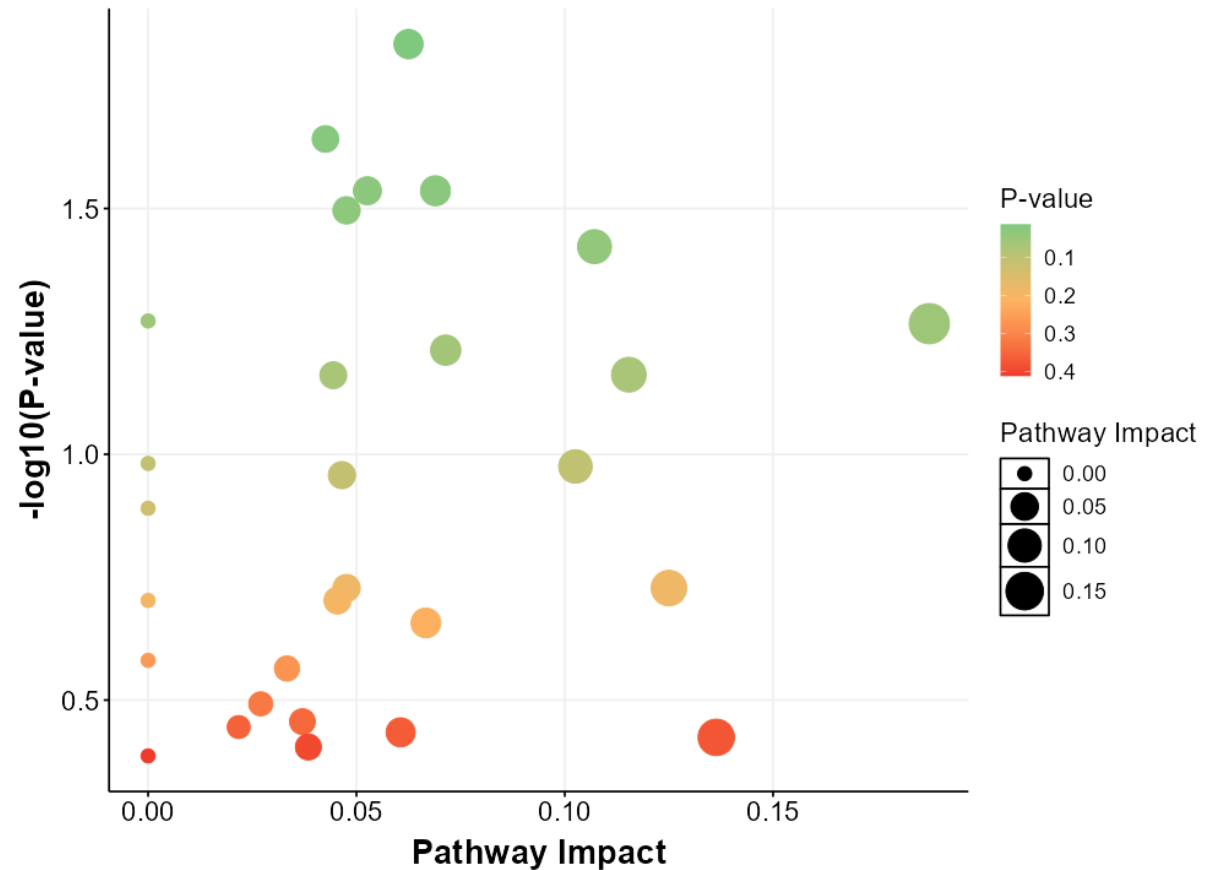
Y-axis Label:

Axis Label Size:

☒ Axis Bold

Tick Label Size:

☐ Tick Bold



Note: The default settings is bold for X-axis legend, and not bold for tick labels.

Step 3: Modify the Bubble Plot

5. Select subtab “Axis Limits”.

- Modify the limits (minimum and maximum) of each axis.

[Back to Tutorials](#) [Reset App](#)

[Data Upload](#) [Plot Dimension & Themes](#)

[Points](#) [Legend](#) [Axis Labels](#)

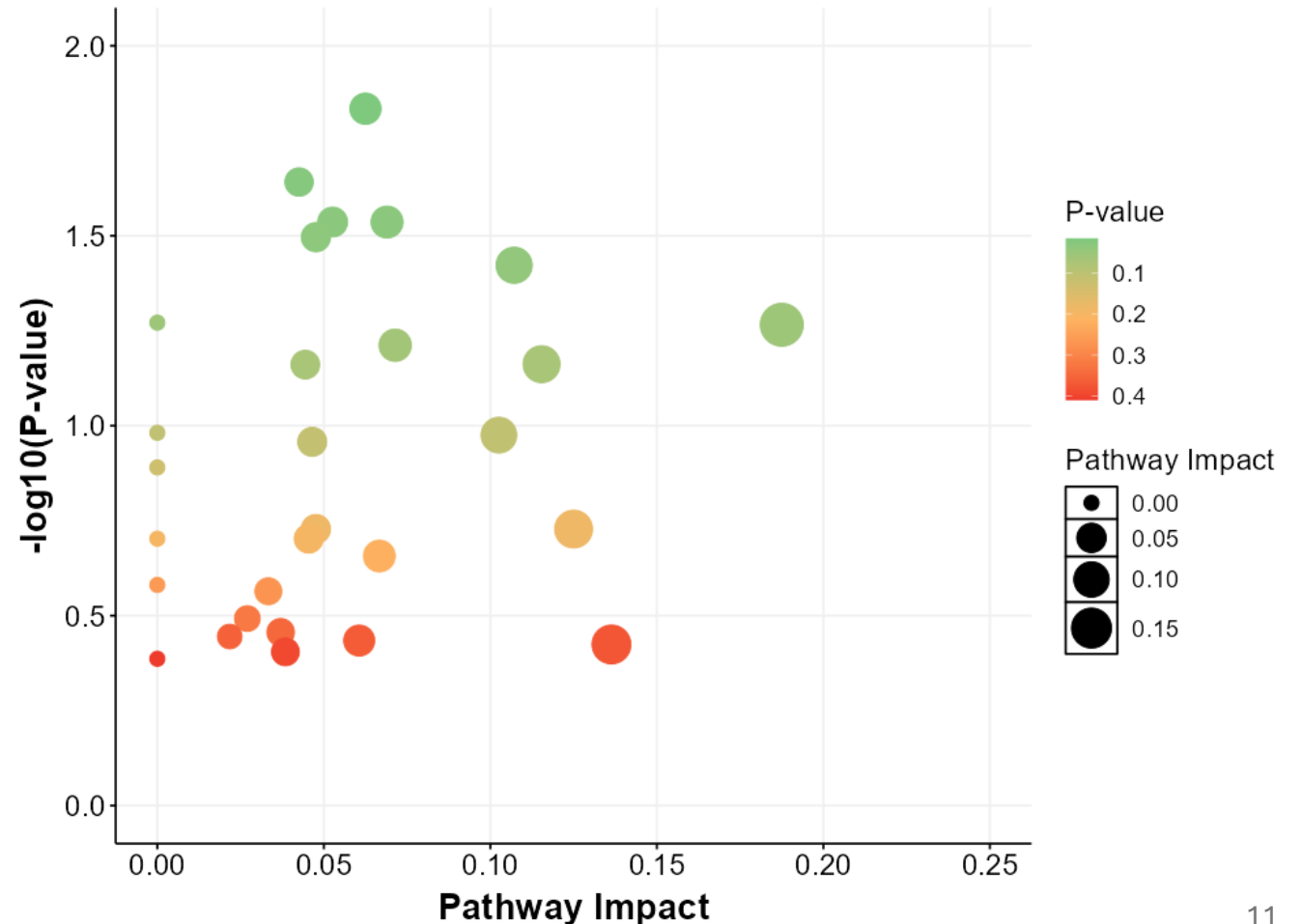
[Axis Limits](#) [Axis Breaks](#) [Save Plot](#)

X-axis Minimum:

X-axis Maximum:

X-axis Minimum:

X-axis Maximum:



Step 3: Modify the Bubble Plot

6. Select subtab “Axis Breaks”.

➤ Modify the break of each axis.

[Back to Tutorials](#) [Reset App](#)

[Data Upload](#) [Plot Dimension & Themes](#)

[Points](#) [Legend](#) [Axis Labels](#)

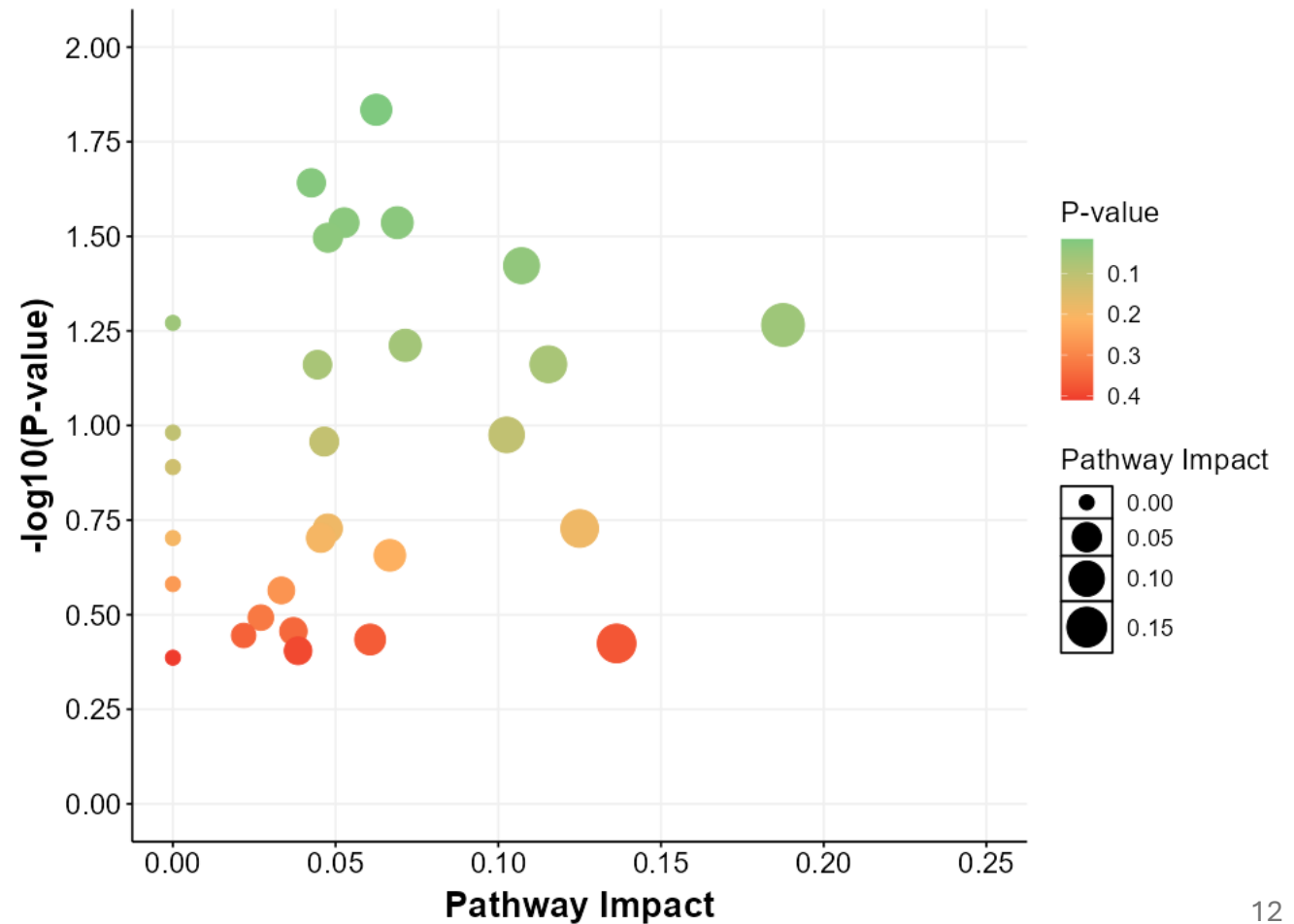
[Axis Limits](#) [Axis Breaks](#) [Save Plot](#)

X-axis Breaks:

0.05

X-axis Breaks:

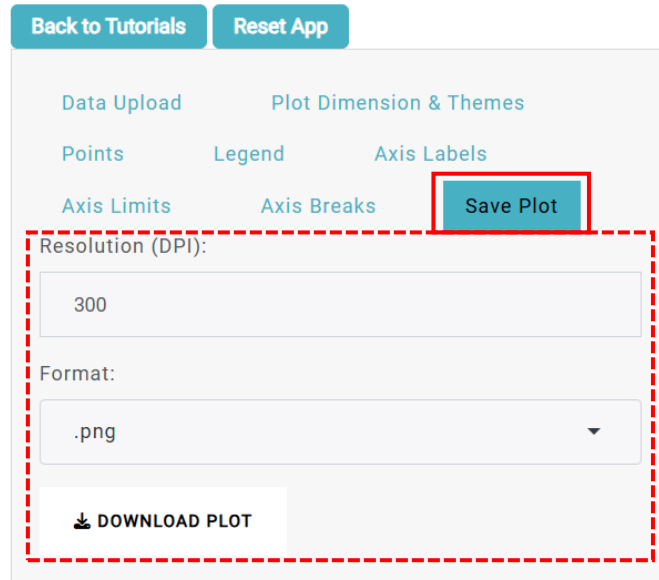
0.25



Step 4: Export the Bubble Plot

Select subtab “Save Plot”.

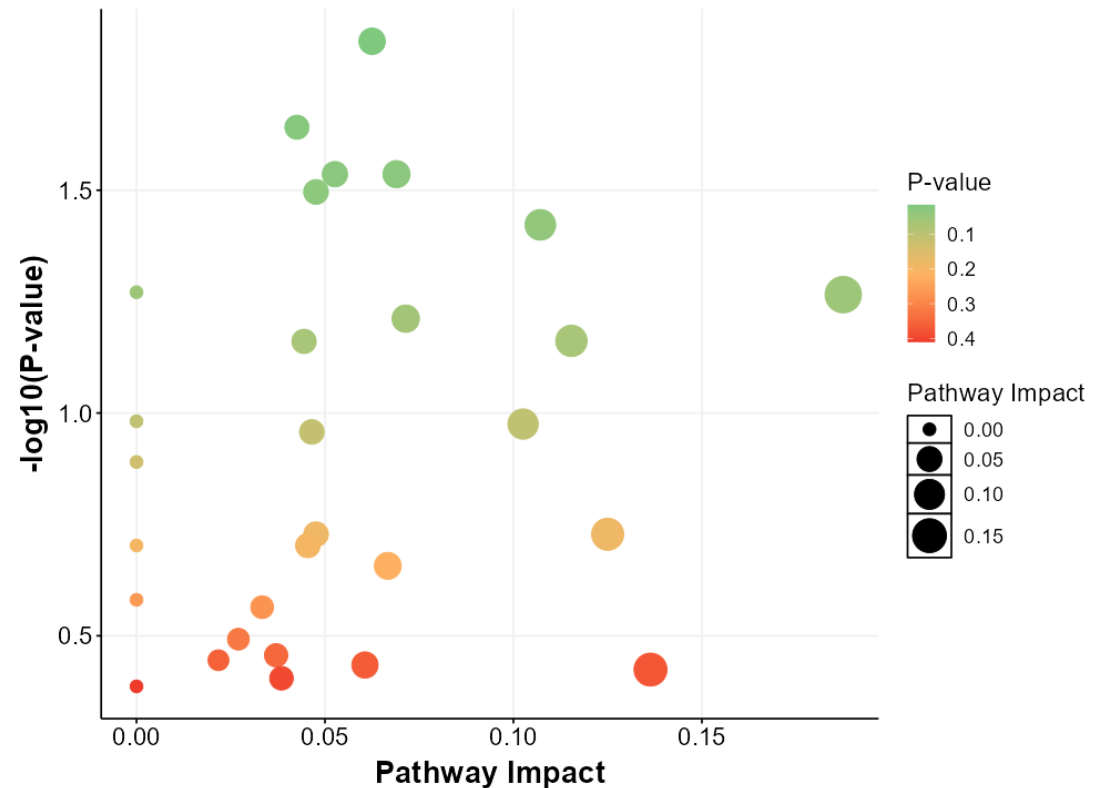
- Select option “Resolution (DPI)” to choose the appropriate resolution (in DPI).
- Select option “Format” to choose the appropriate format (.png, .svg, .tiff, .pdf, .pptx).
- Select “Download Plot” to export the figure.



The screenshot shows the 'Save Plot' subtab selected in the application interface. The subtab is highlighted with a red dashed border. It contains the following elements:

- Resolution (DPI):** A text input field with the value '300'.
- Format:** A dropdown menu with the value '.png'.
- DOWNLOAD PLOT:** A button with a download icon and the text 'DOWNLOAD PLOT'.

Other subtabs visible in the interface include 'Data Upload', 'Plot Dimension & Themes', 'Points', 'Legend', 'Axis Labels', 'Axis Limits', and 'Axis Breaks'.



Note: The .svg format could be further processed with an appropriate toolkit.