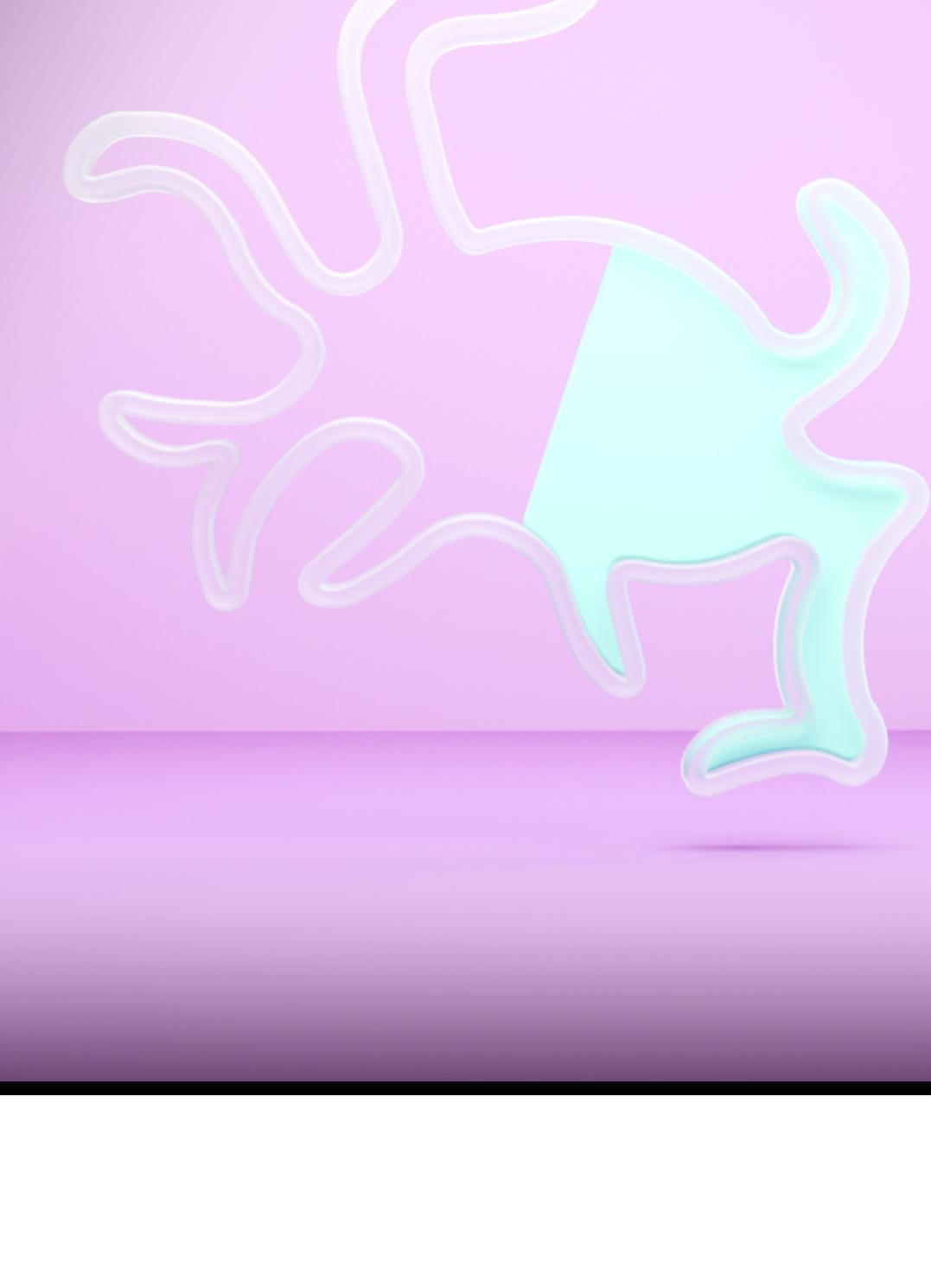


Welcom to STAIN.AI APP

Your AI-powered platform for microglia cell classification and region-based analysis.



STAIN.AI APP is designed to quantify, classify and visualize the distribution of different microglial cells on immunohistochemistry slides (e.g., Iba1). This interface allows you to view AI-classified maps, select specific regions of interest (ROIs), and generate quantitative data.

+ Upload Images

1. Click + Upload Image on the left panel.
2. Select your image files (PNG/JPEG format, size \leq 10MB are recommended).
3. Once uploaded, the image will appear in the list.
4. Select an image to be shown in the central viewer.

Viewer Tools

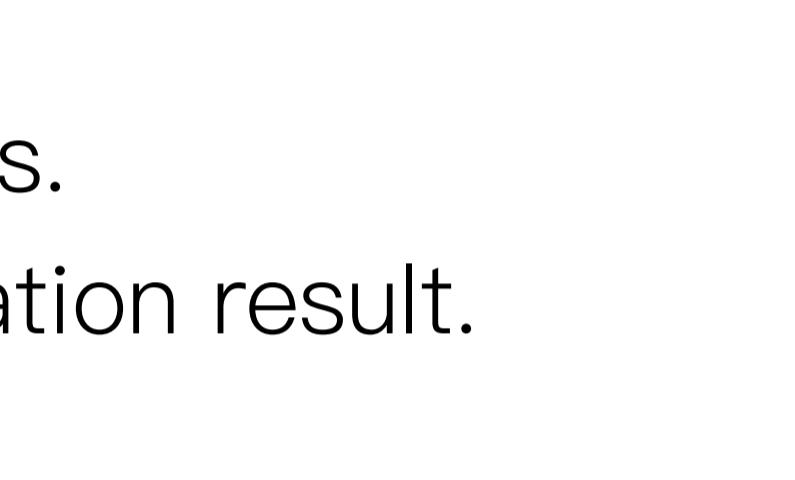
Buttons to provide the following functions:

Zoom In/Out (Click Right/Left)

CLASS TO DISPLAY

Select one or more cell types to display.

Default Zoom ROI Color

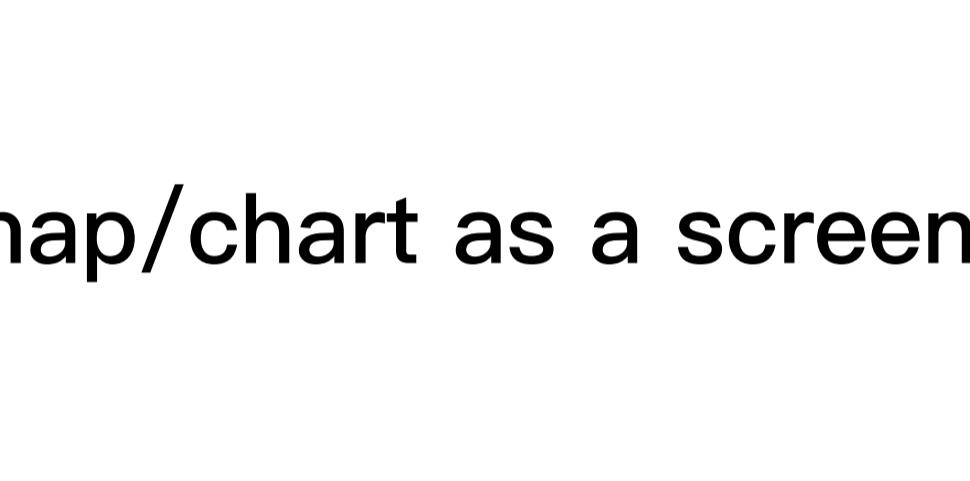


Ramified



Amoeboid

Drage Image Delete ROIs



Hypertrophic



Rod

Polygon ROI Show ROIs



Bushy



Hyper-Rod

Freehand ROI Hide ROIs

All Show All Classes

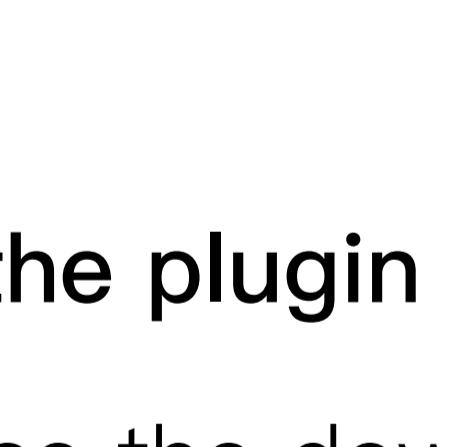
ROI Analysis

1. Use the ROI tool to add an region for analysis.
2. Select one or more ROIs to display classification result.
3. Click + Chart to add an additional chart.
4. Select desired ROIs to compare results.
5. Click ⋮ on any chart to **Delete** or **Save map/chart as a screenshot**

Export Data

1. Click to **Export the data** for on-prem analysis (e.g., ImageJ).
2. StainAI results include:

A folder with the image name



(e.g., ‘Image name’)

Mmap.tif

Original image + Morphological map
(e.g., ‘Image name_Mmap.tif’)

Result.json

Quantitative data to work with image/map
(e.g., ‘Image name_Result.json’)

ROIs.zip

ROIs if defined in StainAI APP

(e.g., ‘Image name_ROIs.zip’)

Tips

- Zoom in to refine your ROI drawing.
- Multiple ROIs can be compared side-by-side.
- Cell classes are color-coded for the ease of result interpretation.
- Charts are automatically updated when ROIs are drawn or adjusted.

Use ImageJ to Analyze Your Data

1. Download the plugin

- Download the ImageJ plugin “[StainAI.jar](#)”.
- You can also obtain it from the official ImageJ website.

2. Install the plugin

- Place the downloaded **StainAI.jar** file into your ImageJ **Fiji.app/plugins** folder.
- Then, restart ImageJ and open the **StainAI** plugin from the **Plugins** menu.

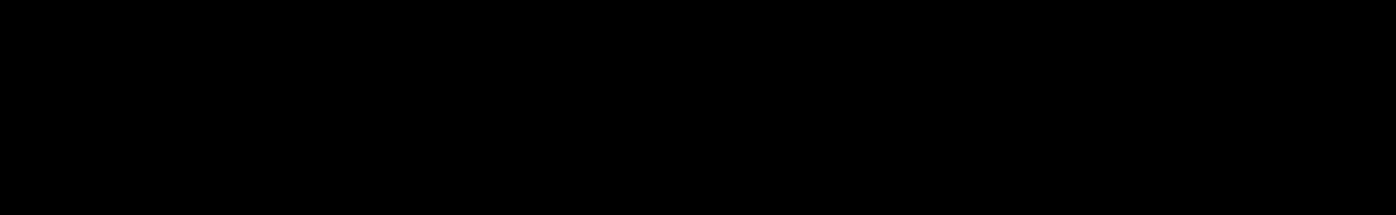
3. Import your JSON file

- Click “import JASON” to load ‘[Image name_Result.json](#)’.

4. Analyze your data

- You can **open** existing ROIs or **add new, delete, rename, or measure ROIs**.

The data will appear as follows:



File	Edit	Font	Results
roi_name	R_count	H_count	B_count
1	0001-2355-2175	68	4

Results include:

- roi_name
- six classes cell counts (R, H, B, A, RD, HR)
- avg_MAS (averaged microglia activation score)
- avg_FM (averaged focus measure)