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Cell counting

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Protocol status: Working
We use this protocol and it's working

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Abstract

Used for counting cells labeled with immunofluorescent markers in mouse brain sections. Sections should be stained, mounted, and imaged with high resolution (2048 x 2048 scanning).

1 Using 2-3 sections to encompass the brain region of interest, acquire high resolution images (2048 x 2048) using tile scanning and z-stack acquisition.

2 Import images into ImageJ.

3 Apply maximum average projection and color adjust as needed, making sure to apply the same settings to all images.

4 For each image, use the multi-section tool in ImageJ to manually quantify the positively-labeled cells of interest. Multiple channels can be viewed to assess cells labeled with multiple markers.

5 Measure the region's area using the selection tool. Use this value to derive the relative density of cells.