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Live imaging of primary neurons

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We use this protocol and it's working

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Abstract

Live imaging of primary neurons under a confocal microscope

Imaging steps

1 Prior to imaging, warm 2 ml of imaging media per imaging dish at 37 °C for atleast 15 minutes
(Imaging media composition:
45% glucose- 660 µl
B27- 1 ml
Hibernate E upto 50 ml)

2 During imaging, aspirate out conditioned media from the dishes, and add 2 ml of pre-warmed imaging media to the dish containing neurons

3 Image neurons live under a spinning disk confocal microscope at 100X magnification (oil objective)

4 Identify the soma of a neuron and collect z-stacks. Neurons which look unhealthy or show signs of blebbing should be excluded from imaging or further analysis.

5 Perform image analysis in Fiji/Image J based on experimental needs