

Jul 08, 2025

Live imaging of primary neurons

 [Nature Communications](#)

DOI

<https://dx.doi.org/10.17504/protocols.io.261gek6eog47/v1>

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DOI: <https://dx.doi.org/10.17504/protocols.io.261gek6eog47/v1>

External link: <https://doi.org/10.1038/s41467-025-62379-5>

Protocol Citation: Bishal Basak, Erika Holzbaur 2025. Live imaging of primary neurons. **protocols.io**
<https://dx.doi.org/10.17504/protocols.io.261gek6eog47/v1>



Manuscript citation:

Basak B, Holzbaur ELF (2025) Mitochondrial damage triggers the concerted degradation of negative regulators of neuronal autophagy. Nature Communications 16(). doi: [10.1038/s41467-025-62379-5](https://doi.org/10.1038/s41467-025-62379-5)

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Protocol status: Working

We use this protocol and it's working

Created: July 08, 2025

Last Modified: July 08, 2025

Protocol Integer ID: 221978

Keywords: live imaging of primary neurons live imaging, primary neurons live imaging, confocal microscope, primary neuron, live imaging, imaging

Funders Acknowledgements:

ASAP

Grant ID: ASAP-000350

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