

Sep 23, 2023

Mitophagy experiments

 [Nature Structural & Molecular Biology](#)

DOI

<https://dx.doi.org/10.17504/protocols.io.n2bvj3yjn1k5/v1>

Elias Adriaenssens¹

¹Sascha Martens lab, University of Vienna, Max Perutz Labs - Vienna



Elias Adriaenssens

Sascha Martens lab, University of Vienna, Max Perutz Labs - ...

Create & collaborate more with a free account

Edit and publish protocols, collaborate in communities, share insights through comments, and track progress with run records.

Create free account

OPEN  ACCESS



DOI: <https://dx.doi.org/10.17504/protocols.io.n2bvj3yjn1k5/v1>

External link: <https://doi.org/10.1038/s41594-024-01338-y>

Protocol Citation: Elias Adriaenssens 2023. Mitophagy experiments. **protocols.io**

<https://dx.doi.org/10.17504/protocols.io.n2bvj3yjn1k5/v1>

Manuscript citation:

Adriaenssens, E., Nguyen, T.N., Sawa-Makarska, J. *et al.* Control of mitophagy initiation and progression by the TBK1 adaptors NAP1 and SINTBAD. *Nat Struct Mol Biol* **31**, 1717–1731 (2024). <https://doi.org/10.1038/s41594-024-01338-y>

License: This is an open access protocol distributed under the terms of the [Creative Commons Attribution License](#), which permits unrestricted use, distribution, and reproduction in any medium, provided the original author and source are credited

Protocol status: Working

We use this protocol and it's working

Created: July 04, 2023

Last Modified: May 31, 2024

Protocol Integer ID: 84439

Keywords: Mitophagy experiments, ASAPCRN, mitophagy in hela cell, mitophagy experiment, mitophagy experiments this protocol, mitophagy, hela cell, cell

Funders Acknowledgements:

Aligning Science Across Parkinson's (ASAP)

Grant ID: ASAP-000350

Marie Skłodowska-Curie MSCA Postdoctoral fellowship

Grant ID: 101062916

Abstract

This protocol describes how to induce mitophagy in HeLa cells.

Attachments



[772-1957.pdf](#)

32KB

Materials

Reagents

 Oligomycin A **ApexBio Technology Catalog #A5588**

 Antimycin A from Streptomyces sp. **Merck MilliporeSigma (Sigma-Aldrich) Catalog #A8674**

 Q-VD-OPh **ApexBio Technology Catalog #A1901**



Mitophagy experiments

8h

- 1 To induce mitophagy, treat cells with [M] 10 micromolar (μM) Oligomycin and [M] 4 micromolar (μM) Antimycin A.
- 2 In case cells are treated for more than ⌚ 08:00:00 , add [M] 10 micromolar (μM) Q-VD-OPh to suppress apoptosis. 
- 3 Analyze the samples by SDS-PAGE and western blot or flow cytometry. 