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Crude Subcellular fractionation of FAM177A1-GFP expressing cells

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Protocol status: Working

We use this protocol and it's working

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Abstract

This protocol details the crude subcellular fractionation of FAM177A1-GFP expressing cells.

Materials

Fractionation buffer:

	A	B
	Tris, pH 7.4	25 mM
	NaCl	150 mM
	Protease inhibitor	



Crude Subcellular fractionation

2d 1h 5m

1

Note

All preparations were performed On ice .

Culture and transfect HeLa cells as described in [dx.doi.org/10.17504/protocols.io.eq2lyp55mlx9/v1](https://doi.org/10.17504/protocols.io.eq2lyp55mlx9/v1)

2

24:00:00 - 48:00:00 after transfection, wash cells in 6 well plates with PBS.

2d



2.1

Add 200 μ L PBS (or fractionation buffer) to each well.



2.2

Scrape cells to release from well and transfer to a 1.7 mL eppendorph tube with additional 100 μ L fractionation buffer wash.

3

Spin the lysate at 1500 rpm, 00:05:00 in a benchtop centrifuge.

5m



4

Remove the supernatant and resuspend cell pellet in 1 mL of cold fractionation buffer.

5

Homogenize resuspended cells with cell cracker (Isobiotec; 8-12 strokes), 1 mL at a time.

5.1

Wash with 1 mL fractionation buffer between samples.



5.2

Always use new syringes for each sample.



- 6 Ultracentrifuge lysates in a Beckman-Coulter table-top ultracentrifuge (TLA100 rotor) at  50000 rpm, 4°C, 01:00:00 to pellet membrane.
- 7 After the centrifugation, transfer the supernatant to a new 1.7 mL Eppendorf tube and save it for western blot analysis.
- 8 Solubilize the membrane fractions from the bottom of the tubes using 4X Laemni buffer for western blot analysis.

1h

