May 14, 2020

# Cell migration assay or Transwell assay

PLOS One

DOI
https://dx.doi.org/10.17504/protocols.io.bgd9js96

Marzia Ognibene[1]

[1]Laboratorio Cellule Staminali Post Natali e Terapie Cellulari, IRCCS Istituto Gaslini, Genova, Italy

Marzia Ognibene



OPEN ACCESS

**DOI:** https://dx.doi.org/10.17504/protocols.io.bgd9js96

**External link:** https://doi.org/10.1371/journal.pone.0244069

**Protocol Citation:** Marzia Ognibene 2020. Cell migration assay or Transwell assay. **protocols.io** https://dx.doi.org/10.17504/protocols.io.bgd9js96

**Manuscript citation:**
Ognibene M, Pezzolo A (2020) Ezrin interacts with the tumor suppressor CHL1 and promotes neuronal differentiation of human neuroblastoma. PLoS ONE 15(12): e0244069. doi: 10.1371/journal.pone.0244069

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

**Created:** May 14, 2020

**Last Modified:** May 14, 2020

**Protocol Integer ID:** 37025

**Keywords:** cell migration assay, cell, transwell

1 Cells are washed in cold PBS, detached with 5mM EDTA, centrifuged at 1200 g for 7 min and resuspended in serum-free medium.

2 Transwell chambers (Corning Costar) are prepared filling with 600 µl of complete medium the lower chamber.

3 The desired amount of cells is plated in 100 µl of serum-free medium in the upper insert (8.0 µm pore size) of each Transwell chamber and incubated at 37°C.

4 After 24 hours at 37°C, fill with 600 µl of 5mM EDTA an empty well beside each used Transwell chamber.

5 Eliminate DMEM from the upper insert and move it inside an EDTA well.

6 Collect DMEM from the lower chamber and put some EDTA inside, to detach cells possibly fallen from the upper insert.

7 Detach cells migrated on the underside of the upper insert using a plastic scraper and collecting them in the EDTA well.

8 Mix in one tube cells collected from the lower chamber and scraped from the insert and centrifuge at 1200 g for 7 min, to count the migrated cells.