ab325577 – Cell Migration Assay (8 µm)

A robust system for the quantitative determination of cell migration.
For research use only - not intended for diagnostic use.

For overview, typical data and additional information please visit: www.abcam.com/ab325577

Storage and Stability: Store kit at 2-8°C immediately upon receipt. Refer to list of materials supplied for storage conditions of individual components.

Materials Supplied

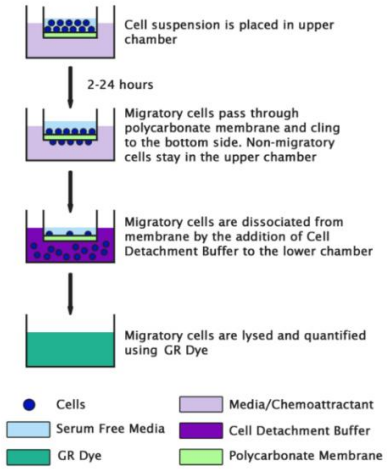
Item	Quantity 12 Tests	Storage Condition
24-Well Migration Plate	1 unit	+4°C
Forceps	1 unit	+4°C
Cell Detachment Solution	5 mL	+4°C
4X Lysis Solution	5 mL	+4°C
GR Dye	25 µL	+4°C

Materials Required, Not Supplied

These materials are not included in the kit, but will be required to successfully utilize this assay:

- Migratory cell lines
- Cell culture medium
- Serum free medium, such as DMEM containing 0.5% BSA, 2 mM $CaCl_2$ and 2 mM $MgCl_2$
- Cell culture incubator (37°C, 5% CO_2 atmosphere)
- Light microscope
- 96-well plate suitable for a fluorescence plate reader
- Fluorescence plate reader

Assay Principle



Assay Protocol

1. Under sterile conditions, allow the 24-well migration plate to warm up at room temperature for 10 minutes.
2. Prepare a cell suspension containing 0.5-1.0 x 10^6 cells/mL in serum free media. Agents that inhibit or stimulate cell migration can be added directly to the cell suspension.
   ∆***Note:*** *Overnight starvation may be performed prior to running the assay.*
3. Add 500 µL of media containing 10% fetal bovine serum or desired chemoattractant(s) to the lower well of the migration plate.
4. Add 300 µL of the cell suspension solution to the inside of each insert.
5. Incubate for 2-24 hours in a cell culture incubator.
6. Carefully aspirate the media from the inside of the insert. Transfer the insert to a clean well containing 225 µL of Cell Detachment Solution. Incubate 30 minutes at 37°C.
7. Completely dislodge the cells from the underside of the membrane by gently tilting the insert several times in the detachment solution. Remove and discard the insert.
8. Prepare sufficient 4X Lysis Buffer/GR dye solution for all samples by diluting the dye 1:75 in 4X Lysis Buffer (for example, add 5 µL dye to 370 µL of 4X Lysis Buffer).
9. Add 75 µL of 4X Lysis Buffer/GR dye solution to each well containing cells and 225 µL of Cell Detachment Solution. Incubate 20 minutes at room temperature.
10. Transfer 200 µL of the mixture to a 96-well plate suitable for fluorescence measurement. Read fluorescence with a fluorescence plate reader at 480 nm/520 nm.

Technical Support

Version 1 | 2026-03-11

For all technical or commercial enquiries please go to:
https://www.abcam.com/en-us/contact-us
https://www.abcam.cn/contact-us (China)
https://www.abcam.co.jp/contact-us (Japan)