

CytoSelect 96-well Cell Migration Assay (5 μ m), Fluorometric Assay Kit

CytoSelect 96-well Cell Migration Assay (5 μ m), Fluorometric

CATALOG #
AAA44590

PRODUCT SYNONYMS

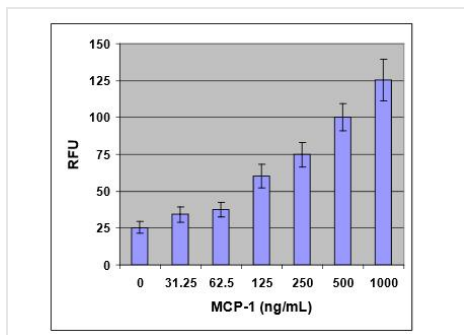
CytoSelect 96-well Cell Migration Assay (5 μ m); Fluorometric; Fluorometric assay kit

PRODUCT SPECIFICATIONS

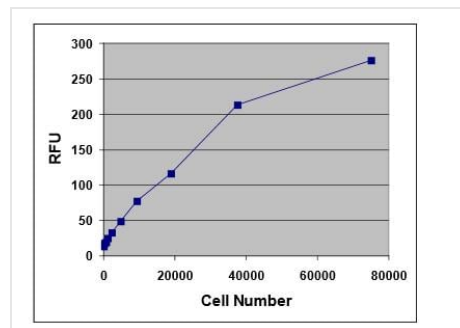
Preparation and Storage

Store all components at 4 degree C until their expiration dates.

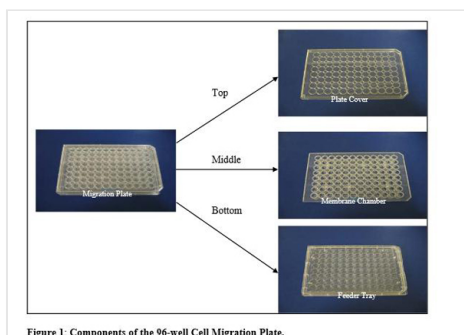
IMAGES



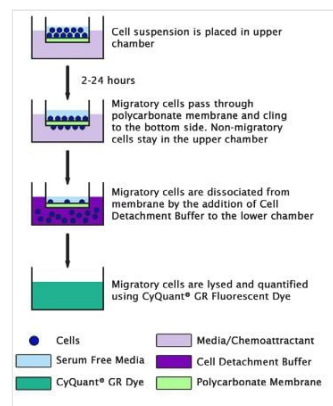
Application Data



Application Data



Application Data



Application Data

ADDITIONAL INFORMATION

Related Product Information for CytoSelect 96-well Cell Migration Assay (5 µm), Fluorometric assay kit	Background: Cell migration is a highly integrated, multistep process that orchestrates embryonic morphogenesis, tissue repair and regeneration. It plays a pivotal role in the disease progression of cancer, mental retardation, atherosclerosis, and arthritis. The initial response of a cell to a migration-promoting agent is to polarize and extend protrusions in the direction of the attractant; these protrusions can consist of large, broad lamellipodia or spike-like filopodia. In either case, these protrusions are driven by actin polymerization and can be stabilized by extracellular matrix (ECM) adhesion or cell-cell interactions. CytoSelect 96-well Cell Migration Assay Kit utilizes a polycarbonate membrane plate (5 µm pore size) to assay the migratory properties of cells. The kit does not require you to prelabel the cells with Calcein AM or remove non-migratory cells (i.e. cotton swabbing). Any migratory cells are first dissociated from the membrane, then lysed and detected with CyQuant GR Dye. CytoSelect 96-well Cell Migration Assay Kit provides a robust system for the quantitative determination of cell migration. The kit contains sufficient reagents for the evaluation of 96 samples. The 5 µm pore size is optimal for monocyte and macrophage cell migration. However, in the case of leukocyte chemotaxis, a smaller pore size (3 µm) is recommended. The CytoSelect Cell Migration Assay Kit contains a polycarbonate membrane chamber (5 µm pore size) in a 96-well plate. The membrane serves as a barrier to discriminate migratory cells from non-migratory cells. Migratory cells are able to extend protrusions towards chemoattractants (via actin cytoskeleton reorganization) and ultimately pass through the pores of the polycarbonate membrane. These migratory cells are then dissociated from the membrane and subsequently detected with CyQuant GR Dye.
Product Categories/Family for CytoSelect 96-well Cell Migration Assay (5 µm), Fluorometric assay kit	Cell Based Assays; Cell Migration; Invasion and Wound Healing; Boyden Chamber Assays; Chemotaxis Assays
References	1. Ridley AJ, Schwartz MA, Burridge K, Firtel RA, Ginsberg MH, Borisy G, Parsons JT, Horwitz AR. (2003) Science 302, 1704-9. 2. Horwitz R, Webb D. (2003) Curr Biol. 13, R756-9. 3. Lauffenburger DA, Horwitz AF. (1996) Cell 84, 359-369. 1. Zhang, C. et al. (2015). Beta-endorphin cell therapy for cancer prevention. Cancer Prev Res (Phila). 8:56-67. 2. Moll, H. P. et al. (2014). A20 regulates atherogenic Interferon (IFN)-gamma signaling in vascular cells by modulating basal IFNbeta levels. J Biol Chem. 289:30912-30924. 3. Wennerberg, E. et al. (2014). Human anaplastic thyroid carcinoma cells are sensitive to NK cell-mediated lysis via ULBP2/5/6 and chemoattract NK cells. Clin Cancer Res. 20:5733-5744. 4. Jun, H.S. et al. (2012). Glucose-6-Phosphatase-beta, implicated in a congenital neutropenia syndrome, is essential for macrophage energy homeostasis and functionality. Blood. 119:4047-4055. 5. Sarkar, D.K. et al. (2011). Transplantation of beta-endorphin neurons into the hypothalamus promotes immune function and restricts the growth and metastasis of mammary carcinoma. Cancer Res. 71:6282-6291. 6. Caglayan, E. et al. (2008). Differential roles of cardiomyocyte and macrophage peroxisome proliferator-activated receptor gamma in cardiac fibrosis. Diabetes 57:2470-2479. 7. Christophi, G. et al. (2008). Modulation of macrophage infiltration and inflammatory activity by the phosphatase SHP-1 in virus-induced demyelinating disease. J. Virol. 83:522-539.

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.

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 Online datasheet: <https://stage.aaabiotech.com/assay-kits/cytoselect-96-well-cell-migration-assay-5-um-fluorometric/44590>