

**QCM Chemotaxis Cell Migration Assay, 96-well (8 µm), fluorimetric The QCM 8 µm 96-well Migration Assay utilizes a 8 µm pore size, which is appropriate for leukocyte migration.**

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Unit EA

**Description**

Also available: Cell Comb(TM) Scratch Assay! Get biochemical data from a scratch assay! Click Here! Introduction Cell migration is a fundamental function of normal cellular processes, including embryonic development, angiogenesis, wound healing, immune response, and inflammation. Microporous membrane inserts are widely used for cell migration and invasion assays. The most widely accepted of which is the Boyden Chamber assay. However, current methods of analysis are time-consuming and tedious, involving cotton swabbing of non-migrated cells on the top side of insert, manual staining and counting. Recently a fluorescence blocking membrane insert was introduced to address these issues, however, this approach requires labeling of the cells with Calcein-AM and extensive washing to remove free Calcein before cell migration. The effect of this treatment on cell behavior/migration remains questionable. The Chemicon QCM 96-well Migration Assay does not require cell labeling, scraping, washing or counting. The 96-well insert and homogenous fluorescence detection format allows for large-scale screening and quantitative comparison of multiple samples. In the Chemicon QCM 96-well Migration Assay, migratory cells on the bottom of the insert membrane are dissociated from the membrane when incubated with Cell Detachment Buffer. These cells are subsequently lysed and detected by the patented CyQuant GR dye (Molecular Probes). This green-fluorescent dye exhibits strong fluorescence enhancement when bound to cellular nucleic acids. The Chemicon QCM 96-well Migration Assay provides a quick and efficient system for quantitative determination of various factors on cell migration, including screening of pharmacological agents, evaluation of integrins or other adhesion receptors responsible for cell migration, or analysis of gene function in transfected cells. The Chemicon QCM 96-well Migration Assay utilizes an 8 µm pore size, as this is appropriate for most cell types. This pore size supports optimal migration for most epithelial and fibroblast cells, however, it is not appropriate for lymphocyte migration experiments. The system may be adapted to study different types of cell migration, including haptotaxis, random migration, chemokinesis, and chemotaxis. In addition, Chemicon also provides QCM 24-well insert cell migration assay systems, CytoMatrix Cell Adhesion strips coated with ECM proteins or anti integrin antibodies, and QuantiMatrix ECM protein ELISA kits. Application: The Chemicon QCM 96-well Migration Assay is ideal for the study of chemotaxis cell migration. The quantitative nature of this assay is especially useful for large scale screening of pharmacological agents. The 8 µm pore size of this assay's Boyden chambers is appropriate for migration studies of most cell types. Each kit provides sufficient materials for the evaluation of 96 samples. The Chemicon QCM 96-well Migration Assay is intended for research use only, not for diagnostic applications.