

## Cell Adhesion Assay Protocol (MAPtrix Screen Arrays)

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### Assay Procedure

#### 1. Introduction

Cell adhesion is a complex process involved in embryogenesis, migration/invasion, tissue remodeling, and wound healing. To perform these processes, cells adhere to extracellular matrix components via adhesion receptors such as integrins, forming complexes with components of the cytoskeleton that ultimately affect cell motility, differentiation, proliferation, and survival.

MAPTrix™ Screen provides a rapid, quantitative method for evaluating cell adhesion.

#### 2. Cell Adhesion Assay Protocol (For 96 well plate)

1. Under sterile conditions, re-hydrate the MAPTrix Screen plate with 200  $\mu$ L of PBS (1x) per well for 20 minutes at room temperature.
2. Remove the PBS from the rehydrated plates
3. Prepare a cell suspension, typically,  $0.1 - 2.0 \times 10^6$  cells/mL in serum free media.
4. Add 150  $\mu$ L of the cell suspension to the inside of each well and centrifuged to promote interaction with the plate surface.
5. Non-adherent cells are gently removed with 3 times PBS washes. The percentage of adherent cells is determined by measuring Calcein AM fluorescence before and after the wash steps.

Although our MAPTrix Screen Arrays are designed as a "quick" way of screening which motifs your cells adhere to in 2D, please note that cells can often adhere/grow on them for much longer periods if required - for instance hiPSCs can grow as long as 2 months on a MAPTrix surface...

**For 12-well plates**, please use 0.5mL of MAPTrix solution (0.1mg/mL) in each well - so total mass 0.05mg per well

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