

Global Cell Solutions

Stem Cell Starter Kit

Introduction:

The Global Eukaryotic Microcarrier (GEM) is a new generation culture surface for transformed, primary and stem cell culture. Composed of alginate and coated in adhesion molecules, the GEM transforms adherent cells into a pipette-able, magnetic substrate. Sample, dispense and transfer some or all of your cells just like a reagent. With the Cube Magnet or BioMagnet you can hold, pull, levitate, agitate and even rotate cells like never before. Now combine that with the ability to transfect, cryopreserve, assay and capture fluorescent images without removing the cells and you truly have the next generation of cell culture.

This Starter Kit includes all the materials needed to get started: GEMs, a low adhesion plate and magnets. The Stem Cell Starter Kit contains the three most commonly used coatings for mesenchymal, embryonic and neural stem cells: gelatin, basement membrane and laminin respectively. Use these coated GEMs in place of traditional culture matrices.

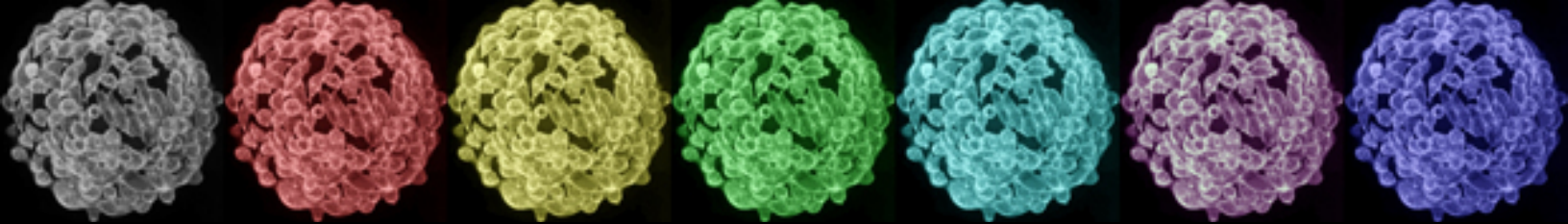
The 24-well ultra low adhesion (ULA) plate is specially prepared to inhibit the attachment of cells ensuring adhesion to the GEM. Additional sizes and layouts are available on our web site depending on your application.

Two **strong** magnets are included as well. The stronger Cube Magnet is ideal for manipulating GEMs in solution. Rotate, hold or pull down GEMs easily. For levitating GEMs in the ULA plate use the BioMagnet. Its flat shape is ideal for applications requiring a broader application of the magnetic field.

Lastly, we've included the dissociation agent Accutase. Although we recommend keeping cells on the GEM throughout culture, assay and application we understand some applications require a cell suspension. Accutase is a trypsin alternative that is gentler on cells and doesn't require quenching with serum. Need a single cell suspension for flow cytometry or similar application? We also offer Accumax, which has all the dissociation power of Accutase while inhibiting the formation of cell-cell clumps in solution. See "Related Products" below for ordering information.

Questions? Suggestions? We want to help! Please contact us at:

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Catalog Number: GKT-6001

Kit Contents:

- 2 mL gelatin GEM
- 2 mL basement membrane GEM
- 2 mL laminin GEM
- One (1) 24-well Ultra Low Adhesion (ULA) plate
- One (1) Cube Magnet
- One (1) BioMagnet
- One (1) bottle Accutase (100 mL)

Note: Do NOT thaw Accutase at 37° C (e.g. in a water bath). Thaw at room temperature or overnight at 4° C.

Storage and Disposal:

- GEM - Store at 4° C and dispose of with biohazard waste.
- Cube Magnet - Store away from electronics and other devices affected by magnetic fields. A used plastic bottle makes a great container.
- BioMagnet - Store away from electronics and other devices affected by magnetic fields.
- Accutase - Store at -20° C until opened. Store at 4° after opening. Dispose of with biohazard waste.

Related Protocols:

- Culturing Cells Using the GEM
- Immunohistochemical Staining of Cells on the GEM

Related Products:

Item	Catalog Number	Includes
GEM Supply Kit - Gelatin	GKT-7000G	2 mL GEM, 24-well ULA plate
GEM Supply Kit - Basement Membrane	GKT-7000BM	2 mL GEM, 24-well ULA plate
GEM Supply Kit - Laminin	GKT-7000L	2 mL GEM, 24-well ULA plate
Accutase	GSP-0101-100	100 mL bottle
Accumax	GSP-0102-100	100 mL bottle
60 mm ULA petri plate	GAA-2000	5 plates
100 mm ULA petri plate	GAA-2001	5 plates
6-well ULA plate	GAA-2002	1 plate
24-well plate	GAA-2003	1 plate
96-well plate	GAA-2004	1 plate