# Corning® BioCoat® Cultureware

Corning BioCoat cultureware is a unique line of tissue culture vessels with various ECM components or synthetic substrates applied to vessel surfaces by a proprietary manufacturing process to create more physiological relevant *in vitro* models. Corning BioCoat cultureware promotes cell attachment, spreading, growth, and differentiation of a variety of primary cells and cell lines in serum-free or serum-containing cultures.

# Collagen I and IV Coated Cultureware

### **Applications:**

- · Promotion of cell attachment and spreading
- Serum-free or reduced-serum culture
- Improving survival of primary cells in culture
- · Cell differentiation and neurite outgrowth

#### Has been used to culture:

- PC12 cells and SH-SY5Y cells
- Primary keratinocytes
- HEK-293 cells
- · MDA-231 breast cancer cells



FBHE cells grown for five days in basal medium containing 10% FBS on tissue culture cultureware (A) and Corning BioCoat Collagen I cultureware (B).

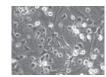
# Poly-D-Lysine and Poly-L-Lysine Coated Cultureware

#### **Applications:**

- · Cell differentiation and neurite outgrowth
- · Attachment of fastidious transfected cell lines
- Support survival of primary neurons in culture
- Serum-free or reduced-serum culture

#### Has been used to culture:

- Transfected cell lines L929, PC12, HEK-293, NIH3T3 cells
- Glial cells oligodendrocytes and astrocytes
- Primary neurons cerebral cortex, cortical and spinal cord neurons



Mixed culture of cortical neurons and astrocytes cultured on Corning BioCoat PDL cultureware. Neurons are highly branched with very long processes. Astrocytes show similar process elongation.

# Gelatin Coated Cultureware

#### **Applications:**

- · Promotion of cell attachment and spreading
- Culture of normal and transfected F9 teratocarcinoma cells for gene expression studies
- Culture of HUVEC for E-Selectin expression and VEGF induction

#### Has been used to culture:

- HUVEC, BME, BAEC
- ES cells
- C2C12 and MM14 myoblasts
- · Normal and transfected F9 teratocarcinoma cells



HUVEC cells grown for seven days on Corning BioCoat Gelatin 6-well multiwell plate. Cells were seeded in the presence of Corning Endothelial cell culture medium.

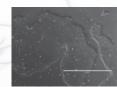
# Corning Matrigel® Matrix Coated Cultureware

### **Applications:**

- Elicitation of tissue-specific cellular morphology and protein production in epithelial cells
- Differentiation of endothelial, muscle, and neuronal cells
- Feeder-independent expansion of pluripotent stem cells
- Development of three-dimensional matrix model systems

#### Has been used to culture:

- Mouse and human embryonic, adult and induced pluripotent stem cells
  - Progenitor cells
  - Healthy and diseased organoids
  - Cancer spheroids
- Primary human hepatocytes
- A wide variety of primary and other cell lines



iPSC growing on hESC Corning Matrigel Matrix. Scale bar is 1000 µm.

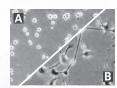
## Laminin Coated Cultureware

#### **Applications:**

- · Promotion of cell attachment and spreading
- Induction of cell differentiation and neurite outgrowth
- Increases proliferation of myoblasts
- · Studies of effects of laminin on cell behavior

### Has been used to culture:

- SH-SY5Y (human neuroblastoma), Neuro-2A (mouse neuroblastoma), N1-E115 (rat neuroblastoma)
- MCF-10A cells
- SK-MEL-28 cells
- HVSMC



NG-108 rat glioma/mouse neuroblastoma cells cultured on tissue treated cultureware (A) and Corning BioCoat Laminin cultureware (B).

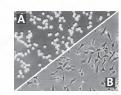
# Fibronectin Coated Cultureware

#### **Applications:**

- · Promotion of cell attachment and spreading
- Rapid expansion of cell populations
- Serum-free or reduced-serum culture
- · Improving survival of primary cells in culture

### Has been used to culture:

- Transfected 293T and transfected H1299 cells
- · Primary cord blood mononuclear cells
- SK-MEL-28 (human melanoma cells)
- NIH3T3 cells



BHK-21 fibroblasts cultured on glass culture slides (A) and on Corning BioCoat Human Fibronectin culture slides (B).

Warranty/Disclaimer: Unless otherwise specified, all products are for research use only. For a listing of US medical devices, regulatory classifications or specific information on claims, visit www.corning.com/resources.