

Certificate of Analysis

Corning® BioCoat™ Cellware
RAT TAIL COLLAGEN TYPE 1
22 mm round Coverslips

Corning BioCoat Cellware provides researchers with the ability to control *in vitro* cellular environments for cell growth and differentiation under physiologically relevant conditions. Extracellular Matrix (ECM) is secreted by cells to form interstitial matrix and basement membrane which constitutes the framework to which cells are anchored. Basement membrane separates cells from mesenchymal connective tissue and provides the spatial orientation and stability required for the organization and development of the characteristic histology of specific tissues. In addition to its structural function, ECM has been recognized for the dynamic role it plays in the regulation of cell growth, differentiation and biochemical function. ECM also appears to function in the sequestration, storage and presentation of growth factors. Corning BioCoat ECM treated Cellware is suitable for serum-free or serum-containing cultures to promote cell attachment, spreading, growth and/or differentiation of a variety of normal and neoplastic cells.

Applications

Corning BioCoat may be used for studies of cellular attachment, spreading, growth and/or differentiation, cell matrix interactions, receptor-ligand binding, gene expression and regulation, embryogenesis and organ development, drug screening and sensitivity assays and the culture of primary tumors.

CATALOG NUMBER: 354089 LOT NUMBER: 32624001

COVERSLIPS: No. 1 German glass, 22 mm round

PACKAGING: 60 coverslips per package

COLLAGEN I
SOURCE: Rat Tail Tendon

USE: Rat Tail Collagen, Type I is useful as a substrate for growth and differentiation of many normal and transformed mammalian cells, such as epithelial, endothelial, muscle and neuronal cells. Specific applications for collagen I-treated cellware include differentiation of intestinal epithelial cells,¹ ECM-receptor interaction during neurite outgrowth of pheochromocytoma cells² and during adhesion of keratinocytes,³ and simulation of adipogenesis of preadipose cells.⁴

NOTE: Coverslips are coated on both sides.

QUALITY CONTROL: Tested for their ability to promote attachment and spreading of HT-1080 (human fibrosarcoma) cells. Tested and found negative for the presence of bacteria and fungi.

STORAGE: Stable when stored at 2-8°C. **DO NOT FREEZE.**

EXPIRATION DATE: February 14, 2027

REFERENCES:

1. Bement, W.M., et al., J. Cell Biol. **121**:565 (1993).
2. Zhana, Z., et al., J.Biol. Chem., **268**:5557 (1993).
3. Adams, J.C., and Wall, F.M., J.CellBiol., **115**:829 (1991).
4. Guller, S., et al., Endocrinology, **130**:2609 (1992).

SAFETY RECOMMENDATION: Handle in accordance with good industrial hygiene and laboratory safety practices.

Elizabeth B Hartigan
Quality Assurance

December 31, 2024
Date