**Certificate of Analysis**

Corning® BioCoat™ Cellware
HUMAN FIBRONECTIN
96-well Microplates

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 Cellware may be used for studies of cellular 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.

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| CATALOG NUMBER: | 354409 | LOT NUMBER: 12224006 |
| PLASTICWARE: | Falcon® Multiwell Plates | |
| PACKAGING: | 96-well Microplates (5 each) | |
| EXTRACELLULAR MATRIX: | HFN is a broad range cell adhesion factor that can be used as a media additive to serum free medium or, more effectively as a thin coating on tissue culture surfaces to promote adhesion and proliferation of BHK and CHO cells,[1] endothelial cells,[2] fibroblasts,[3] smooth muscle cells,[4] neurons,[5] and normal and cystic fibrosis airway epithelial cells.[6] HFN is a 440-500 kD dimeric glycoprotein consisting of two 220-250 kD subunits linked by two disulfide bonds. It exists as a soluble dimer in plasma and as an insoluble multimer in the extracellular matrix and on cell surfaces.[7,8] Its cell adhesion activity is mediated in part by an interaction of the RGD sequence in its cell binding domain with fibronectin-specific integrin receptors and by interactions of other domains with collagen, heparin, and cell surface glycosaminoglycans.[7,9] The conformation and orientation of absorbed fibronectin has been shown to effect cell spreading and strength of adhesion of endothelial cells.[10] | |
| SOURCE: | Human Plasma<br><br>**NOTE: The human plasma used in the preparation of this product has been tested and found negative for HBsAG and HIV antibody. Nevertheless, this product should be handled using the same safety precautions used when handling potentially infectious material.** | |
| QUALITY CONTROL: | Corning BioCoat Human Fibronectin Coated Cellware has been tested for its ability to promote attachment and spreading using BHK-21 cells. | |

Discovery Labware, Inc., Two Oak Park, Bedford, MA 01730, Tel: 1.978.442.2200 (U.S.)
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 LOT NUMBER: 12224006

Tested and found negative for the presence of bacteria and fungi.

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

EXPIRATION DATE: December 24, 2025

REFERENCES:


1. Barnes, D. and Sato, G., Cell, **22**:649 (1980).
2. Moser, R., et.al., Blood, **79**:2937 (1992).
3. Tremble, P.M., et.al., J. Cell Biol., **121**:1433 (1993).
4. DiMilla, P.A., et.al., J. Cell Biol., **122**:729 (1993).
5. McGuire, P.G., and Seeds, N.W., Cell, **4**:633 (1990.
6. Schweibert, E.M., et.al., Proc. Natl. Acad. Sci. USA, **89**:10623 (1992).
7. Hynes, R.O., Fibronectin, Springer-Verlag, NY (1990).
8. Mosher, D.F., Fibronectin, Academic Press, NY (1989).
9. Aota,S., et.al., J. Biol. Chem., **266**:15939 (1991).
10. Juliano, D.J., et.al., J. Biomed. Mater. Res., **27**:1103 (1993).


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

**Quality Assurance**

May 17, 2024
**Date**

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