



# HT BioFlex® Culture Plates

Product Information Sheet

02/23/16 Rev. 1.1

HT BioFlex® culture plates are 14 mm 24-well plates with flexible silicone elastomer well bottoms with a total growth surface area of 37.47 cm<sup>2</sup> (1.56 cm<sup>2</sup>/well; membrane thickness: 0.010 inch; Fig. 1). The silicone elastomer comes untreated or with covalently bonded proteins to improve cell attachment (Table 1). HT BioFlex® culture plates can be used with the Flexcell® Tension System to apply up to 8% equibiaxial tensile strain to cells in monolayer culture. For more information, see the HT BioFlex® product webpage at <http://www.flexcellint.com/HTBioFlex.htm>.

## PLATING CELLS ON HT BIOFLEX® CULTURE PLATES

Cells should be seeded onto the membranes according to the laboratory's established protocol for primary cultures or continuous cell lines in the medium of choice. In general:

1. Release cells from their substrates with 0.05% trypsin, trypsin-EDTA, 0.05% bacterial collagenase, or other means.
2. Add serum containing media to the cells to neutralize the trypsin or collagenase.
3. Count cells and determine the number of cells needed, approximately 13,000 – 38,000 cells for each well of a 24-well HT BioFlex® culture plate. *NOTE: Cell seeding density will vary depending on cell type. We recommend testing cell seeding densities to determine the best cell number for your application and cell type.*
4. Wash cells with medium to remove trypsin or collagenase.
5. Resuspend cells in medium of choice and seed into each well. If cells will be stretched, we recommend having 1 ml of medium in each well and changing media approximately every 48-72 hours, or according to your laboratory's standard tissue culture methods.

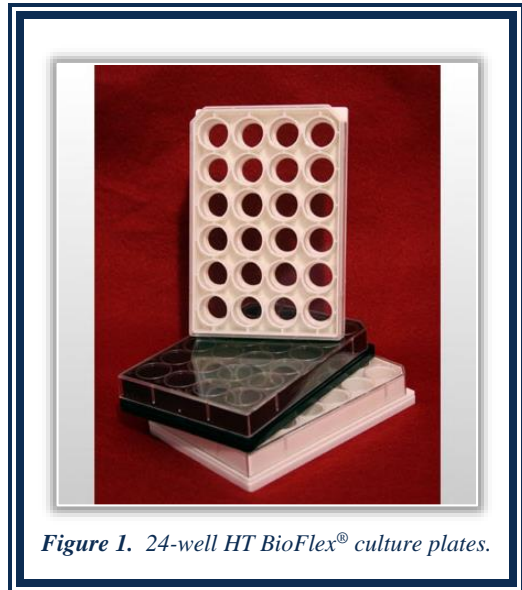


Figure 1. 24-well HT BioFlex® culture plates.

It should be noted that the only cells that receive uniform strain are those attached to the area of the membrane over the post when the membrane is in its fully stretched position. Therefore, it is best to attempt to plate cells only in the uniformly strained area or to view or test the cells that are only in the uniformly strained area. Flexcell® HT Cell Seeders™ aide users during seeding of cells into HT BioFlex® plates. For more information, please see the HT Cell Seeder™ product webpage at <http://www.flexcellint.com/HTCellSeeders.htm>.

## ORDERING INFORMATION

HT BioFlex® culture plates are sold individually or by the case of 40 in either black (Cat. No. HTPB-3001) or white (Cat. No. HTPW-3001). Each plate is sterile and individually packaged in a sealed bag. See Table 1 for catalog numbers and corresponding protein coatings. Flexcell® culture plates have a shelf life of 1 year when stored at room temperature or 4 °C in the dark or out of direct light.

For more information about Loading Stations™, see <http://www.flexcellint.com/LoadingStation.htm>.

Flexcell® culture plates are protected by the following patents: US Patents 4,789,601 and 4,822,741 (International Patents DE3855631D1, DE3855631T2, EP0365536B1); US Patent 6,048,723; US Patent 6,218,178.

Table 1. HT BioFlex® culture plate catalog numbers and corresponding protein coatings.

Catalog Number <sup>#</sup>	Coating*
HTPW-3001U/HTPB-3001U	Untreated
HTPW-3001A/HTPB-3001A	Amino
HTPW-3001C/HTPB-3001C	Collagen I
HTPW-3001C(IV)	Collagen IV
HTPB-3001C(IV)	
HTPW-3001E/HTPB-3001E	Elastin
HTPW-3001L/HTPB-3001L	Laminin (YIGSR)
HTPW-3001P/HTPB-3001P	Pronectin (RGD)

<sup>#</sup>White culture plate catalog number starts with HTPW; black culture plate catalog number starts with HTPB.

\*For more information on these coatings see Tech Report 106: Matrix Bonded Growth Surfaces. Growing Cells in a More Natural Matrix Environment: [http://www.flexcellint.com/documents/106\\_MatrixBondedSurfacesTech.pdf](http://www.flexcellint.com/documents/106_MatrixBondedSurfacesTech.pdf).