

## Multi-layer Cell Culture Flasks

Multi-layer cell culture flasks 3-layers and 5-layers are available, which providing 525 cm<sup>2</sup> and 875 cm<sup>2</sup> cell growth surface area respectively, they are equivalent to 3 and 5 times the surface area of the T-175 culture flask. The higher-capacity design make cell culture faster, easier, and more efficient.

Cap Type: Plug Seal Vent

Surface: TC treated

Flask Body: Polystyrene (PS)

Flask Cap: High-density Polyethylene (HDPE)

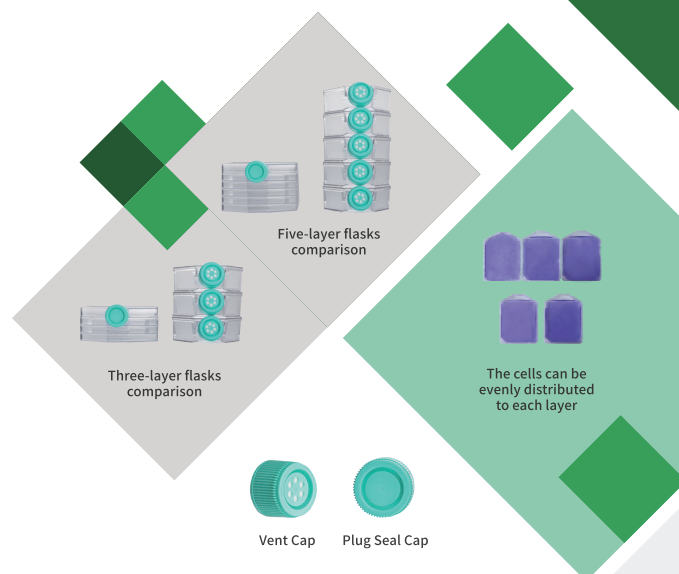
Filter Membrane: Polytetrafluoroethylene (PTFE)

Conforming to USP Class VI standards



### Features:

- ✦ The medium can be evenly distributed across each layer, providing a consistent culture environment for uniform cell growth
- ✦ The surface treatment of each layer is uniform and stable, effectively guaranteeing large-scale cell cultures
- ✦ Cells and reagents can be mixed directly in the flask, with no leakage or splash between layers, saving time and reducing the risk of contamination
- ✦ Suitable for 10mL serological pipets to liquid aspiration/replenishment or cells harvesting directly in the flask
- ✦ Every flask is printed lot No. for quality traceability
- ✦ Sterilized by irradiation, SAL 10<sup>-6</sup>
- ✦ DNase/RNase free, Non-pyrogenic, Non-cytotoxic



### Ordering Information

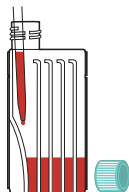
Cat. No.	Layer	Surface	Cell Growth Area (cm <sup>2</sup> )	Type of Cap	Sterile	Qty. Per Bag/Case
TCF011525	3	TC treated	525	Plug Seal	Y	2/12
TCF012525	3		525	Vent	Y	2/12
TCF011875	5		875	Plug Seal	Y	1/8
TCF012875	5		875	Vent	Y	1/8



## Instructions for Use

**1**

### ADDING MEDIA



Add required amount of medium into the Multi-Flask by pipet or by pouring using typical culture volumes of 25-50 ml per layer. To avoid foaming of medium, allow liquid stream to flow along the slope of the Logo side of the Multi-Flask.

**2**

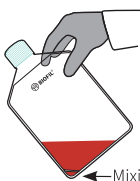
### PREPARING CELL SUSPENSION



Dispense cell suspension from a concentrated stock into the growth medium using a 10 ml pipet. Be sure to dip the pipet tip into the medium.

**3**

### MIXING OF CELLS



Mix position: Hold the Multi-Flask upright with the Logo facing you and tilt counter-clockwise to a 45° angle on a flat work surface.

← Mixing Port

**4**

### MIXING OF CELLS



Holding at the same angle, gently rotate the Multi-Flask forward (neck pointing away from you).

Then, gently rotate it backward (neck pointing towards you).

**5**

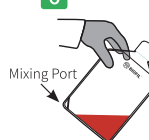
### EQUILIBRATING FLUID



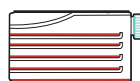
After mixing or adding cell suspension, place the Multi-Flask vertically on a flat work surface to equalize liquid volume among all the layers.

**6**

### PARTITION AND DISTRIBUTE



Hold the Multi-Flask upright with the Logo facing you and tilt clockwise to a 45° angle on a flat work surface to partition the liquid into each of the layers.

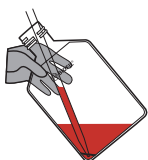


After placing the Multi-Flask flat on a work surface, gently rock back and forth and side-to-side to distribute cells evenly onto culture surfaces—taking care not to spill liquid from each layer.

**7**

### MEDIA REMOVAL

#### Aspirating Method



To aspirate or remove media tilt the Multi-Flask, with the Logo facing you, counter-clockwise to a 45° angle while inverting the Multi-Flask toward you.

Then, tilt the Multi-Flask to the right, continuing to aspirate all residual media.

**8**

### MEDIA REMOVAL

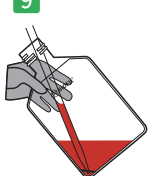
#### Pouring Method



With Logo facing down, pour spent media from the Multi-Flask.

**9**

### CELL HARVESTING



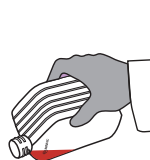
Add dissociating reagent (> 5 ml per layer) based on preferred protocol and bring to mix position (Step 3). Then, follow Steps 5-6.

Neutralize with inactivating solution and mix following Steps 3-6. Gently swirl to dislodge cells completely.

Follow Step 7 “Aspirating Method”. Collect cell suspension using a JET 10 ml serological pipet.

**10**

### CELL HARVESTING



Follow Step 8 “Pouring Method”. Pour detached cell suspension into a JET conical tube.

Rinse with additional media as needed.

