CELLTREAT®
SCIENTIFIC PRODUCTS

Cell Tower Application Guide

Culture Set Up

Refer to the table below for recommended starting volumes, and optimize according to individual cell lines and protocol requirements.

Recommended starting volumes:

Part Number	Layers	Growth Area	Recommended Working Volume
229301	1	656cm^2	130 – 200mL
229322	2	1296cm^2	260 – 400mL
229355	5	3216cm^2	650 – 1000mL
229366	10	6416cm^2	1300 – 2000mL

1. Seed cell suspensions directly into the Cell Tower using either vent cap opening.
2. Replace the vent cap securely. Equilibrate the suspension by placing the Cell Tower on either of its long sides. Liquid will come in contact with the cap, this is normal and expected.
3. Turn the Cell Tower 90°, so the vent caps are at the top and the Tower is resting on its short side.
4. Gently lay the Cell Tower horizontally to allow the cell suspension to equally distribute across all layers.
5. Incubate according to respective protocols.

Changing Medium

1. To empty medium, remove either vent cap and pour liquid directly from the Cell Tower into an appropriate receptacle.

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2. Add new medium and equilibrate distribution to all layers following the steps outlined above.

Harvesting Cells

1. Remove medium from the Cell Tower as outlined above.
2. Wash the monolayer(s) of cells with warm PBS, ensuring distribution to all layers. Remove and discard PBS.
3. For cells which are typically difficult to harvest, a second PBS wash is recommended.
4. Add an appropriate volume of warm dissociating reagent (e.g. trypsin) and ensure distribution to all layers. Apply gentle rocking, tapping, and/or brief (1-5min) incubation to maximize cell detachment as appropriate.
5. Collect the cell suspension in 250 or 500mL centrifuge tubes (Part No. 229466 or 229463), or 1000mL solution bottles (Part No. 229785).
6. Neutralize the dissociating reagent:
    a. Add an equal or greater volume of fresh, full medium to the Cell Tower. Follow the steps outlined above to ensure full distribution to all layers. Collect the solution and add to the first collection of cells.
    b. If a significant amount of cells remain uncollected in the Cell Tower after step (a), then a second round of dissociation reagent addition and collection is recommended before neutralizing.
    c. If neutralization is not possible (i.e. serum-free conditions are required), centrifuge the collected cells, discard the medium, and resuspend the pellet in fresh medium.