

Splitting Cells

Everything must be done with sterile technique in the hood.
Before beginning spray hood down with 70% ethanol and wipe clean.

Pre-Warm Trypsin and Media in 37C waterbath.

- Aspirate old media (tilted plate)
- Rinse gently with 5 ml sterile room temperature D-PBS.
- Aspirate off PBS (tilted plate)
- Add 2.5 ml trypsin
- Put back in incubator (2-5 mins; depending on cell line).
- Tap dish to help release cells.
- Add 7.5 ml of media to cells to make volume an even 10 ml.
- To maintain the cells - dilute cells the appropriate amount:
 - Ex, for 1:10, do 1ml of cells, 9 ml of media in new plate
 - For 1:4, do 1 ml of cells, 3 ml of media in new plate.
- To plate the cells for a new experiment (i.e. transfection):
- Spin down remaining cell solution for 5 minutes at 1000 rpm at room temperature.
- Aspirate the supernatant
- Resuspend cells in 10 ml fresh media.
- Put 10 ul of trypan blue stain into centrifuge tube. Add to that 10 ul of your cells.
- Count the number of non-blue cells in the 4, 4x4 squares

Example, say you count 304 cells:

$$304/4=92.25 \times 10= 922.5 \times 2 \text{ (The Dilution factor)} = 1845 \text{ cells/ul}$$

-Plate appropriate number of cells. Make sure to mix the cells by pipetting to prevent cells from settling at the bottom while counting.

-Wash the counter by rinsing in water.