

## Endothelial Cell Subculture and Preservation for *in vitro* Angiogenesis Assays

### Part I: Subculture and Cryopreservation

1. Trypsinize
  - a. Add 2ml of Trypsin (Lonza for HMVEC, TrypLE for HUVEC), incubate until cells lift
2. Neutralize
  - a. Add 5 ml Trypsin Neutralizing Solution
  - b. Rinse flask with ~5 HEPES-BSS
3. Pellet cells
  - c. Centrifuge at 200g for 5 minutes
2. Aspirate supernatant and resuspend in EBM (for assays), EGM (to passage) or Cryopreservation media (Add DMSO after resuspension)

### Part II: Cryopreservation

1. Aspirate supernatant and resuspend in 4°C cryopreservation media
  - a. Cryopreservation Media
    - 80% Complete growth media, EGM-2
    - 10% FBS
    - 10% DMSO
  - b. Add DMSO only after resuspension of cells in Cryopreservation Media
2. Freeze 1ml aliquots of 500,000-2,000,000 cells per ml at -80C overnight, then liquid nitrogen for long term storage.