SOP: Cell Viability Test

Trypan blue exclusion test of cell viability

The dye exclusion test is used to determine the number of viable cells present in a cell suspension. It is based on the principle that live cells possess intact cell membranes that exclude certain dyes, such as trypan blue, whereas dead cells do not.

- Centrifuge an aliquot of cell suspension being tested for viability 5 min at 150xg and discard supernatant
- Resuspend the cell pellet in 10µl Trypan blue solution
- Place this aliquot on the microscope slide and cover with cover slide
- Observe the cells under the microscope; dead cells are dyed black, vital cells appear white

Materials:

0.4% trypan blue in PBS (store in dark bottle and filter after prolonged storage)
- 160mg Trypan blue in 40 ml PBS