

**Cat # MG4683S-100ML****MESGEN™**  
INNOVATION BIOTECHNOLOGY**Description**

Trypan Blue is the most common stain used in cell count and viability assays. Viable cells exclude the dye, while nonviable cells absorb the dye and appear blue. Cells should be in suspension as single cells in buffered saline before counting. Trypan blue can be used in assays providing total cell count, viable cell or nonviable cell count alone. This solution is provided at the common concentration of 0.4% (w/v).

**Procedure**

1. Aseptically withdraw a sample of the cell suspension and prepare 1:2, 1:5, 1:10, or 1:100 dilutions as required in Phosphate Buffered Saline (PBS). Dilute 1:5 in 0.5% Trypan Blue. The optimal concentration of cells for counting is  $5-10 \times 10^5$  cells/ml (50-100 cells per large square of the hemocytometer counting chamber) after dilution in the Trypan Blue Solution.
2. After staining with Trypan Blue, the cells should be counted within three minutes; after that interim, the non-viable cells will begin to take up the dye.
3. Using a Pasteur pipette, withdraw a small amount of the stained cell suspension and place the tip of the pipette onto the slot of a clean hemocytometer with a planar coverslip, thereby creating a three-dimensional space. The cell suspension will be transferred under the coverslip by capillary action as the fluid is allowed to flow from the capillary under the coverslip to cover the area of the grid. Next fill the opposite chamber with the second diluted sample. Do not overfill the chamber and do not disturb the coverslip after the hemocytometer has been "charged."
4. Place the hemocytometer on the stage of an inverted microscope using the 10X objective. Adjust focus until a single counting square fills the field. The etched grid marking the boundaries for the counting procedure delineates a specific volume within the space.

**Storage conditions**

15-30°C

**Shelf life**

36 months from date of manufacture



***For Research Use Only. Not Intended for Diagnostic or Therapeutic Use.***