Creighton
UNIVERSITY

Trypan Blue for Viability

(Greg A. Perry, Ph.D.)

Equipment:

Balance
100 ml glass bottle with lid
0.45 μm or 0.2 μm syringe top filter
10cc or 60cc syringe

Reagents:

Stock Solution

0.2 gm	Trypan Blue (Sigma Catalog # F-7378)
99.8 ml	Distilled Water
0.2%	Sodium Azide

Working Solution

0.43 gm	Sodium Chloride (NaCl)
9.58 ml	Distilled Water
2 ml	Stock Solution

Methods:

Stock Solution (10x)

1) Dissolve the trypan blue in the water.
2) Filter with 0.45μm or 0.2μm filter to remove particles.
3) Add 0.2% sodium azide to inhibit bacterial growth.

Working Solution (2x)

1) Make a 5x saline solution by dissolving the sodium chloride in 9.58 ml distilled water.
2) Add 2ml Trypan Blue Stock Solution to 0.5ml of the 5x Saline Solution and mix well.

To do a viability count: Add 1 part trypan blue working solution to 1 part cell suspension (at 2-5x106 cells/ml), mix and count using a hemacytometer.