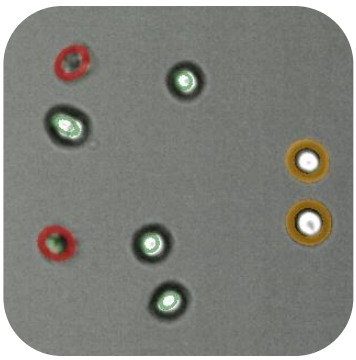
# Trypan Blue / Annexin-V

Short Note
SN-B124-XV-02



## General Purpose

This application is a combination of the common used Trypan Blue viability test with an Annexin V (FITC labeled) conjugate as a probe to detect phosphatidylserine (PS) on the cell surface. The location of PS on the outer surface is found in an early Apoptotic status of cells as well as other forms of cell dead.

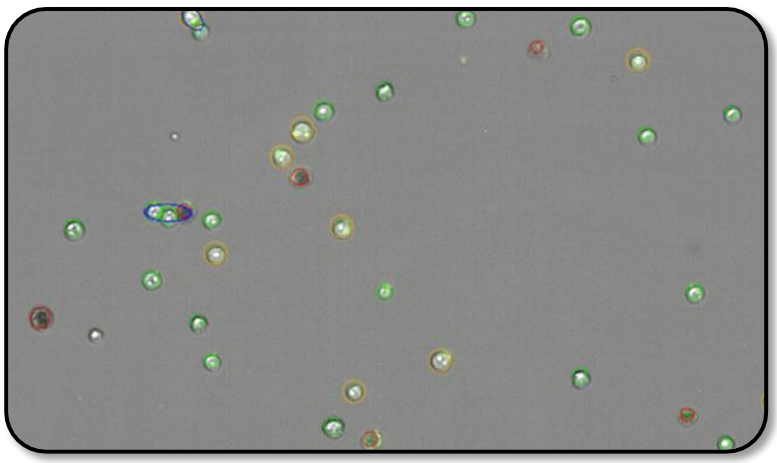
## Result Table

- ***Viability*** *Percentage of viable cells in your sample*
- ***VCD*** *Viable Cell Density [#/ml]*
- ***CD*** *Cell Density [#/ml]*
- ***Apoptotic Cells*** *Number of cells that are Apoptotic*
- ***Apoptotic Ratio*** *Percentage ratio of Apoptotic cells*
- ***Cell Count*** *Number of cells listed per well*
- ***Aggregates per ml*** *Number of aggregates per ml*
- ***# of Aggregates*** *Number of aggregates*
- ***Ratio of Aggregates*** *Percentage ratio of aggregates in the sample*
- ***Avg Cell Size*** *Average of the Cell Size [µm²]*
- ***Reactor ID*** *Name of the Reactor*
- ***Sample ID*** *Name of the Sample*
- ***Final Dilution*** *Dilution factor*
- ***Volume per Well*** *Sample Volume per well*
- ***Processed Area*** *Fraction in percentage of the measured area on the total area of the well*

## Example

This example shows a typical result image of a Trypan Blue Annexin V (FITC labeled) assay.

**Marked green** = Viable
**Marked red** = Dead
**Marked orange** = Apoptotic
**Marked blue** = Aggregates

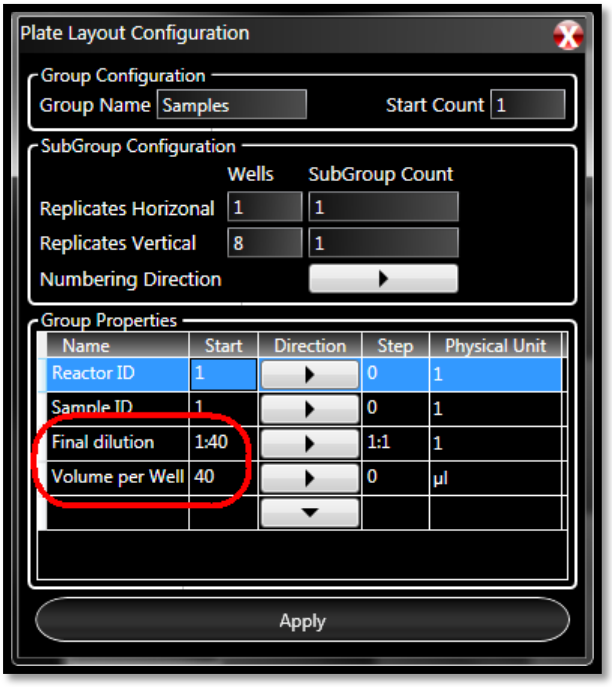


## Dilution Table

The following table refers to the Corning Costar Half Area plate (# 3695) and an Annexin V-FITC conjugate that is supplied by Sigma Aldrich (A9210-10UG).

| expected cell density | | final dilution [1] | PBS-- [µl] | binding buffer AnxV-FITC | sample [µl] | TryB 0,02% [µl] |
|---|---|---|---|---|---|---|
| 1x10 E7 | ⇒ | 1:80 | 760 | 18,9 / 1,1 | 20 | 800 |
| 5x10 E6 | ⇒ | 1:40 | 360 | 18,9 / 1,1 | 20 | 400 |
| 1x10 E6 | ⇒ | 1:20 | 160 | 18,9 / 1,1 | 20 | 200 |
| 5x10 E5 | ⇒ | 1:10 | 60 | 18,9 / 1,1 | 20 | 100 |
| 1x10 E5 | ⇒ | 1:5 | 20 | 18,9 / 1,1 | 20 | 40 |
| less than 1x10 E5 | ⇒ | 1:4 | 0 | 18,9 / 1,1 | 20 | 40 |

## Plate Layout




*The plate layout must be edited for your chosen settings*