



## Annexin V-Cy3 Apoptosis Detection Kit

Cat. No. CTG-AP0006

1 Kit (100 tests)

### Procedure

1. Induce apoptosis by desired method. Concurrently incubate a control culture without induction.
2. Collect  $1-5 \times 10^5$  cells by centrifugation.
3. Resuspend cells in 500  $\mu$ l of 1X Binding Buffer.
4. Add 5  $\mu$ l of Annexin V-Cy3 and 1  $\mu$ l of SYTOX Green dye. Note: Thaw the SYTOX Green dye in room temperature before use.
5. Incubate at room temperature for 5-10 min in the dark.
6. Analyze the stained cells by flow cytometry using FL1 channel for SYTOX Green dye (Ex = 488 nm; Em = 530 nm) and FL2 channel for Annexin V-Cy3 (Ex = 543 nm; Em = 570 nm).

The cell population should separate into three groups: live cells with only a low level of fluorescence, apoptotic cells with red fluorescence and necrotic cells with green fluorescence. The flow cytometric results can also be confirmed by viewing the cells under a fluorescence microscope using FITC filter for SYTOX and rhodamine filter for Annexin V-Cy3.

Notes: For adherent cells, gently trypsinize and wash cells once with serum-containing media before incubation with Annexin V-Cy3 and SYTOX dye.

### References

1. Pigault C., et al., J. Mol. Biol., 236, 199 (1994).
2. Trotter, P.J., et al., Biochem. J., 308, 591 (1995).
3. Kuypers, F.A., et al., Blood, 87, 1179 (1996).
4. Darzynkiewicz, Z., et al., Cell Growth and Apoptosis, IRL Press, pp143-167 (1995)
5. Breeuwer, P., et al., Appl. Environ. Microbio., 61, 1614 (1995).
6. Martin, S.J., et al., J. Exp. Med., 182, 1545 (1995).