Recombinant Human Annexin V Protein (100 µg)

Cat.No. AV100

Package Size: 100 µg

Description:
Annexins are ubiquitous homologous proteins that bind phospholipids in the presence of calcium (1, 2). The cellular changes involved in the apoptotic process include loss of phospholipid asymmetry during the early stages. This phenomena is universal and is not limited to stimulus or to mammalian cells, but also occurs in insect and plant cells (3, 4). In living cells, phosphatidylserine is transported to the inside of the lipid bilayer by the Mg$^{2+}$-ATP dependent enzyme, aminophospholipid translocase (5). At the onset of apoptosis, phosphatidylserine becomes translocated to the external portion of the membrane. Since the movement of phosphatidylserine from the internal membrane surface to the external surface is an early indicator of apoptosis, Annexin V and its conjugates that interact strongly and specifically with phosphatidylserine may be used to detect apoptosis (6). Annexin V conjugates can be used to detect apoptotic cells significantly earlier than DNA-based assays. Fluorescent dye labeled Annexin V has applications in flow cytometry, fluorescence microscopy, and laser scanning cytometry (7).

Synonyms: PAP-1, Calphosbindin I, Lipocortin V

Purity Grade: Minimum 95% (SDS-PAGE)

Form/Aspect: Solution in phosphate-buffered saline
   (pH 7.4, 136 mM NaCl, 2.68 mM KCl, 10 mM Na$_2$HPO$_4$, 1.76 mM KH$_2$PO$_4$)

Concentration: 1 mg / ml

Source: Recombinant Annexin V from Human placenta, produced in E. coli.

Storage Temp: Store at 2~8ºC.

Reference: