

Human Annexin V/ANXA5 Activity protein

Cat #: D-AKP303

Size: 1 mg / 10 mg / 30 mg

Storage: Store at -20°C

Product Introduction

Annexin V (ANXA5 or Annexin A5), a member of the annexin protein family, possesses the ability to selectively bind to membrane phospholipids when calcium is present. This particular dye exhibits a strong affinity for phosphatidylserine (PS), which resides in the inner leaflet of the plasma membrane. In the initial stages of cellular apoptosis, PS undergoes translocation from the inner leaflet to the outer leaflet of the plasma membrane, thereby exposing it to the external environment. Annexin V, as a distinct marker for early cell apoptosis, effectively detects this translocation event of PS to the external environment.

Product Properties

- **Sequence:** Human Annexin V isoform (P08758) (Met1-Asp320) .
- **Protein length:** 320 amino acids (N-Met)
- **Molecular weight:** Predicted molecular mass is 36 kDa.
- **Biological Activity:** Binds to phosphatidylserine (PS). Exhibits anti-phospholipase activity.
- **Formulation:** Lyophilized from sterile PBS, pH 7.4.
- **Storage:** Lyophilized Human Annexin V/ANXA5 Activity protein should be stored desiccated below -18°C for 12 months. Upon reconstitution, the protein should be stored at 4°C between 2-7 days and below -18°C for 3 months. For long term storage it is recommended to add a carrier protein (0.1% HSA or BSA). Please prevent freeze-thaw cycles.

Usage notes: Always centrifuge tubes before opening. Centrifuge at 12,000 rpm for 1 min. Reconstitute lyophilized Human Annexin V protein using provided buffer at ≥ 1 mg/mL, then dilute. For conjugation, reconstitute protein using

amino-free conjugation buffer. Protein concentration should be > 2 mg/mL.

Product Data

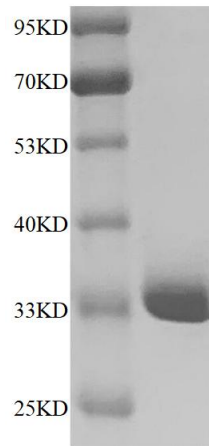


Fig.1 SDS-PAGE analysis of Human Annexin V/ANXA5 Activity protein (D-AKP303)

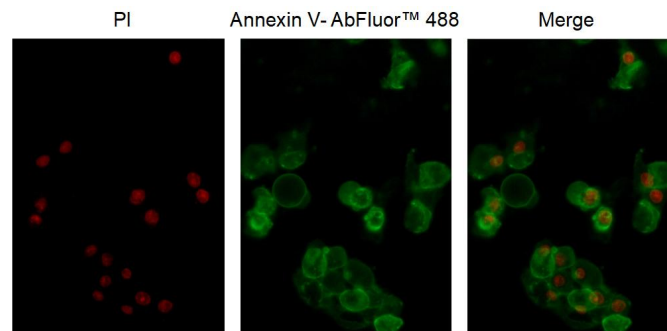


Fig.2 HeLa cells treated with camptothecin for 24 hrs, stained with Annexin V-AF 488 and PI. The cell is in late stage apoptosis/necrosis, showing both Annexin V-AF 488 and PI staining (green membrane, red fragmented nucleus).

Disclaimer

The reagent is only used in the field of scientific research, not suitable for clinical diagnosis or other purposes.