



Product Information

Annexin 36 kDa from bovine lung

Product Number **A 2449**
Storage Temperature -20 °C

Product Description

Synonyms: Lipocortin, Calpactin, Chromobindin

Annexin 36 kDa protein has been affinity purified from bovine lung. Based on its method of preparation, tissue source, and analysis with monoclonal antibodies, it is probably a mixture of Annexins I and II.^{1,2} Further elucidation of its specific form and function has not been performed.

Annexins are a group of homologous proteins that bind phospholipids in the presence of calcium. They function as regulators of calcium in some cellular processes and act as mediators of exocytosis for cellular secretion of messenger molecules, enzymes or extracellular matrix proteins. They have been found throughout the animal and plant kingdoms, with the calcium binding site being highly conserved in all species studied.^{3,4}

The name annexin is derived from the Greek annex meaning "bring/hold together" and was chosen to describe the principal property of annexins, that of holding together certain biological structures, particularly membranes. The first annexins were discovered independently and given diverse and unrelated names associated with their biochemical properties, synexin, lipocortin, calpactin, and chromobindin. Standardized nomenclature has been proposed by the participants of the 50th Harden Conference on Annexins, with the annexins being divided into 5 groups:

- A: Human annexins and cognate orthologs
- B: Animal annexins without human orthologs
- C: Fungi/molds and close relatives
- D: Plants
- E: Protists

Because annexins bind to phospholipids, they have become valuable tools for the study of membrane changes during apoptosis.⁵ Labelled Annexin V (Annexin A5 using the nomenclature system above) is used as a probe to identify changes occurring in cell membranes during the early stages of apoptosis, and to label cells undergoing apoptosis.⁶⁻⁸

Precautions and Disclaimer

For Laboratory Use Only. Not for drug, household or other uses.

Preparation Instructions

Reconstitute the vial contents in 500 µl of 10 mM imidazole buffer, pH 7.4, containing 100 mM NaCl, 0.5 mM DTT, and 1 mM NaN₃.

Storage/Stability

Stock solutions can be divided into aliquots and stored at -20 °C.

References

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8. Reutelingsperger, C.P., et al., Visualization of cell death *in vivo* with the annexin A5 imaging protocol. *J. Immunol. Methods*, **265(1-2)**, 123-132 (2002).

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