

Recombinant human annexin A1

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Description

Recombinant human annexin A1 (ANXA1) is produced in our E.Coli expression system.

Synonyms: annexin A1, annexin I, annexin-1, Calpactin II, Calpactin-2, Chromobindin-9, Lipocortin I, Phospholipase A2 Inhibitory Protein, p35

Formulation

0.2 μ m filtered solution containing 1 mg/ml recombinant human annexin A1

Stability and Storage

6 months from date of shipment, if stored at 2-8°C.

Quality Control

Purity > 95% assessed by SDS PAGE, migrates as 38 kDa band under reducing conditions.

Activity :Ellipsometry: >95% of annexin A1 binds calcium-dependently to phosphatidylserine.

Background

Annexin A1 belongs to the annexin family of structurally related phospholipid-binding proteins that share unique Ca^{2+} - and lipid-binding properties and that are preferentially located on the cytosolic face of plasma membranes¹. Annexin A1 has a molecular weight of approximately 39 kDa and is found in the cytoplasm, on the cell surface, and in the extracellular fluid². Increase of the synthesis and function of annexin A1 is a major mechanism of glucocorticoids' anti-inflammatory effects^{4,5}. Annexin A1 both suppresses phospholipase A2 activity, thereby blocking eicosanoid production, and inhibits various leukocyte inflammatory events (such as epithelial adhesion, extravasation, chemotaxis, respiratory burst). Recombinant annexin A1 activates the FPR-2/ALX axis, resolves inflammation, stabilizes blood-brain barrier and promotes epithelial wound healing. In contrast, the 33kDa molecule that is generated by removal of the N-terminal aa 2-26 peptide, promotes activation of vascular endothelial cells and neutrophil trans-endothelial migration³.

References

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