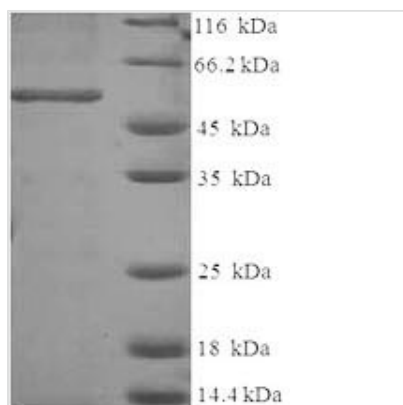




Recombinant Human Annexin A2 (ANXA2)

Product Code	CSB-EP001840HU
Relevance	Calcium-regulated mbrane-binding protein whose affinity for calcium is greatly enhanced by anionic phospholipids. It binds two calcium ions with high affinity. May be involved in heat-stress response.
Abbreviation	Recombinant Human ANXA2 protein
Storage	The shelf life is related to many factors, storage state, buffer ingredients, storage temperature and the stability of the protein itself. Generally, the shelf life of liquid form is 6 months at -20°C/-80°C. The shelf life of lyophilized form is 12 months at -20°C/-80°C.
Uniprot No.	P07355
Alias	Annexin II;Annexin-2;Calpactin I heavy chain;Calpactin-1 heavy chain;Chromobindin-8;Lipocortin II;Placental anticoagulant protein IV ;PAP-IVProtein I;p36
Product Type	Recombinant Protein
Immunogen Species	Homo sapiens (Human)
Purity	Greater than 90% as determined by SDS-PAGE.
Sequence	STVHEILCKLSLEGDHSTPPSAYGSVKAYTNFDAERDALNIETAIKTKGVDEVTI VNILTNRSNAQRQDIAFAYQRRTKKELASALKSALSGHLETVILGLLKTPAQYDA SELKASMKGGLGTDEDSLIEIICSRTNQELQEINRVYKEMYKTDLEKDIISDTSGD FRKLMVALAKGRR AEDGSVIDYELIDQDARDLYDAGVKRKGTDV PKWISIMTE RSVPHLQKVFD RYKSYSPYDML ESIRKEVKGDLEN AFLNLVQCIQNKPLYFAD RLYDSMKGKGTRDKVLIRIMVSRSEVDMLKIRSEFKRKYGKSLYYYYIQDTKG DYQKALLYLCGGDD
Research Area	Signal Transduction
Source	E.coli
Target Names	ANXA2
Expression Region	2-339aa
Notes	Repeated freezing and thawing is not recommended. Store working aliquots at 4°C for up to one week.
Tag Info	N-terminal 6xHis-SUMO-tagged
Mol. Weight	54.5kDa
Protein Length	Full Length of Mature Protein
Image	



(Tris-Glycine gel) Discontinuous SDS-PAGE (reduced) with 5% enrichment gel and 15% separation gel.

Description

The recombinant Human ANXA2 protein is encoded by the gene of ANXA2 (2-339aa). The gene of ANXA2 was cloned in a system (E.coli) that supported the expression of ANXA2. Modification of ANXA2 by recombinant DNA technology could lead to the expression of the target protein. The protein was fused with N-terminal 6xHis-SUMO tag in the production. The purity is 90% determined by SDS-PAGE.

ANXA2 is a protein coding gene that encodes Annexin A2 also known as annexin II. According to some studies, ANXA2 may have the following features. ANXA2 plays a key role in enhancing the invasiveness of multidrug resistant human breast cancer cells. Mesenchymal stem cells promote the occurrence of liver cancer through the interaction of lncRNA-MUF with ANXA2 and miR-34a. Anxa2 combines with STAT3 to promote the epithelial to mesenchymal transition of breast cancer cells. ANXA2 promotes the progression of esophageal cancer by activating the MYC-HIF1A-VEGF axis. The up-regulation of ANXA2 gene promotes the proliferation and invasion of breast cancer MCF-7 cells. ANXA2 is identified as a specific bleomycin target, which induces pulmonary fibrosis by blocking the autophagy flux mediated by TFEB. P-glycoprotein is associated with Anxa2 and promotes the invasion of multidrug resistant breast cancer cells. Circular RNA analysis shows that circular RNA from ANXA2 can be used as a new biomarker for multiple sclerosis.

Reconstitution

We recommend that this vial be briefly centrifuged prior to opening to bring the contents to the bottom. Please reconstitute protein in deionized sterile water to a concentration of 0.1-1.0 mg/mL. We recommend to add 5-50% of glycerol (final concentration) and aliquot for long-term storage at -20°C/-80°C. Our default final concentration of glycerol is 50%. Customers could use it as reference.

Shelf Life

The shelf life is related to many factors, storage state, buffer ingredients, storage temperature and the stability of the protein itself. Generally, the shelf life of liquid form is 6 months at -20°C/-80°C. The shelf life of lyophilized form is 12 months at -20°C/-80°C.