

Synonym

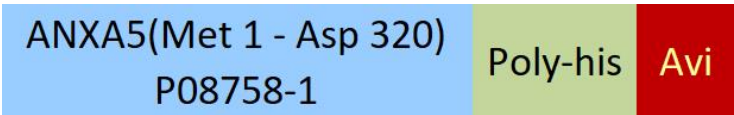
ANXA5,ANX5,ENX2,PP4,Annexin V,Annexin A5

Source

Biotinylated Human Annexin A5 Protein, His,Avitag, premium grade(AN5-H81E5) is expressed from E. coli cells. It contains AA Met 1 - Asp 320 (Accession # [P08758-1](#)).  
Predicted N-terminus: Met 1

*It is produced under our rigorous quality control system that incorporates a comprehensive set of tests including sterility and endotoxin tests. Product performance is carefully validated and tested for compatibility for cell culture use or any other applications in the early preclinical stage. When ready to transition into later clinical phases, we also offer a custom GMP protein service that tailors to your needs. We will work with you to customize and develop a GMP-grade product in accordance with your requests that also meets the requirements for raw and ancillary materials use in cell manufacturing of cell-based therapies.*

Molecular Characterization



This protein carries a polyhistidine tag at the C-terminus, followed by an Avi tag (Avitag™).

The protein has a calculated MW of 39.5 kDa. The protein migrates as 38 kDa when calibrated against [Star Ribbon Pre-stained Protein Marker](#) under non-reducing (NR) condition (SDS-PAGE).

Labeling

*Biotinylation of this product is performed using Avitag™ technology. Briefly, the single lysine residue in the Avitag is enzymatically labeled with biotin.*

Protein Ratio

Passed as determined by the HABA assay / binding ELISA.

Endotoxin

Less than 0.1 EU per µg by the LAL method / rFC method.

Sterility

Negative

Mycoplasma

Negative

Purity

>90% as determined by SDS-PAGE.  
>90% as determined by SEC-MALS.

Formulation

Lyophilized from 0.22 µm filtered solution in PBS, pH7.4 with trehalose as protectant.  
Contact us for customized product form or formulation.

Reconstitution

Please see Certificate of Analysis for specific instructions.  
*For best performance, we strongly recommend you to follow the reconstitution protocol provided in the CoA.*

Storage

For long term storage, the product should be stored at lyophilized state at -20°C or lower.  
*Please avoid repeated freeze-thaw cycles.*

This product is stable after storage at:

- 20°C to -70°C for 12 months in lyophilized state;
- 70°C for 3 months under sterile conditions after reconstitution.

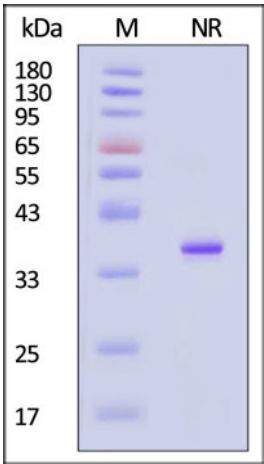
SDS-PAGE

SEC-MALS

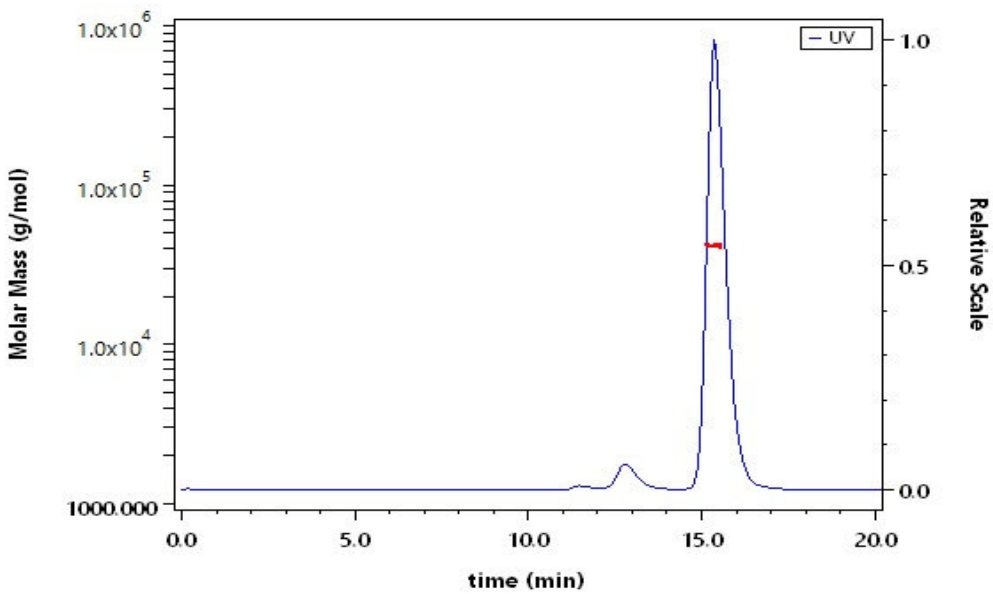


Biotinylated Human Annexin A5 Protein, His,Avitag™, premium grade

Catalog # AN5-H81E5



Biotinylated Human Annexin A5 Protein, His,Avitag, premium grade on SDS-PAGE under non-reducing (NR) condition. The gel was stained with Coomassie Blue. The purity of the protein is greater than 90% (With [Star Ribbon Pre-stained Protein Marker](#)).



The purity of Biotinylated Human Annexin A5 Protein, His,Avitag, premium grade (Cat. No. AN5-H81E5) is more than 90% and the molecular weight of this protein is around 35-50 kDa verified by SEC-MALS.

[Report](#)

Background

Annexin A5 is a phospholipid binding protein, which binds with high affinity and selectivity to PS in the presence of calcium. PS is predominantly located in membrane leaflets, which face the cytosol. However, recent findings show that each cell type has the molecular machinery to expose PS at its cell surface. This machinery is activated during the execution of apoptosis. Once PS is exposed at the cell surface it exhibits procoagulant and proinflammatory activities. Annexin A5 will bind to the PS-exposing apoptotic cell and can inhibit the procoagulant and proinflammatory activities of the dying cell. Annexin A5 has also been identified as an anticoagulant protein in the blood coagulation cascade, by acting as an inhibitor of prothrombin activation. The presence of antibodies to Annexin A5 is associated with systemic lupus erythematosus (SLE), recurrent spontaneous abortions and systemic sclerosis (SSc).

