



Product Information

Annexin V (His Tag)

Catalog Number:

29088: 1 mg solid 29088-100ug: 100 ug solid

Storage and Handling

Store at -20° C. Annexin V (His Tag) is supplied lyophilized from a 0.2 um filtered buffer containing 25 nM HEPES, 140 mM NaCl, 1 mM EDTA, pH 7.4. Product is stable for at least 6 months from date of receipt when stored as recommended.

Reconstitute the lyophilized Annexin V (His Tag) with 1 mL or 100 uL sterile deionized water for a stock solution of 1 mg/mL. Mix gently for 30 to 60 minutes at room temperature to dissolve, avoiding vigorous mixing or vortexing. Reconstituted Annexin V (His Tag) without BSA is stable for 1 week at 4°C, or up to 3 months at -20°C under sterile conditions. Aliquots should not be refrozen after thawing.

For longer storage, BSA can be added to a final concentration of 1 mg/mL to stabilize Annexin V during freezing. Annexin V stock solutions with 1 mg/mL BSA can be stored for at least 6 months at 4°C as sterile solutions, or with the addition of 0.1% sodium azide as a preservative.

Note: Do not add BSA if you intend to conjugate this protein to a dye or other molecule.

Product Specifications

Molecular Weight: 36.8 kDa, observed under reducing SDS-PAGE

Purity: >98% pure as demonstrated by SDS-PAGE

Endotoxin Loval: <1 ELl/ug determinded by PuroConn III Percembin

Endotoxin Level: < 1 EU/ug, determinded by PyroGene™ Recombinant Factor C method.

Product Description

Annexin V is a member of the annexin family of calcium-dependent phospholipid binding proteins with high affinity for phosphatidylserine (PS). In viable cells, PS is predominantly located on the inner leaflet of the plasma membrane. During apoptosis, PS translocates from the inner leaflet to the outer leaflet. Fluorescently labeled Annexin V can bind to PS located on the outer leaflet and therefore is commonly used as a marker of apoptosis. Annexin V has also been identified as an anticoagulant protein that is involved in the blood coagulation cascade through indirect inhibition of the thromboplastin-specific complex.

Recombinant Human Annexin V (His Tag) is expressed from *E. coli* as a single, non-glycosylated polypeptide chain containing 320 amino acids with a calculated molecular weight of 36.8 kDa.

Amino Acid Sequence

Animo Acia ocquence					
1 <u>0</u>	2 <u>0</u>	3 <u>0</u>	Q 4 <u>0</u>	5 <u>0</u>	6 <u>0</u>
MAQVLRGTVT	DFPGFDERAD	AETLRKAMKO	G LGTDEESILT	LLTSRSNAQR	QEISAAFKTL
7 <u>0</u>	8 <u>0</u>	9 <u>0</u>	10 <u>0</u>	11 <u>0</u>	12 <u>0</u>
FGRDLLDDLK	SELTGKFEKL	IVALMKPSRL	YDAYELKHAL	KGAGTNEKVL	TEIIASRTPE
13 <u>0</u>	14 <u>0</u>	15 <u>0</u>	16 <u>0</u>	17 <u>0</u>	18 <u>0</u>
ELRAIKQVYE I	EEYGSSLEDD \	VVGDTSGYYQ	RMLVVLLQAN	RDPDAGIDEA (QVEQDAQALF
19 <u>0</u>	20 <u>0</u>	21 <u>0</u>	22 <u>0</u>	23 <u>0</u>	24 <u>0</u>
QAGELKWGTD	EEKFITIFGT	RSVSHLRKVF	DKYMTISGFQ	IEETIDRETS	GNLEQLLLAV
25 <u>0</u>	26 <u>0</u>	27 <u>0</u>	28 <u>0</u>	29 <u>0</u>	30 <u>0</u>
VKSIRSIPAY I	LAETLYYAMK	GAGTDDHTLI	RVMVSRSEID	LFNIRKEFRK	NFATSLYSMI
	32 <u>0</u> ALLLLCGEDD	НННННН			

Related Products

Catalog number	Product				
29003 29085	Anneyin V (CHR) I)ve (Conjugates				
29006 29082	Annexin V Near IR (CF(R) I)ve (Conjugates				
29003R 29069R	Annexin V CF® Dye Conjugates, Azide-Free, Lyophilized				
99902	5X Annexin Binding Buffer (15 mL)				
10402 10408	NucView® Caspase-3 Enzyme Substrates				
30067	Dual Apoptosis Assay Kit with NucView® 488 Caspase-3 Substrate & CF®594 Annexin V				
30076	Dual Apoptosis Assay Kit with NucView® 488 Caspase-3 Substrate & CF®640R Annexin V				
30062	NucView® 488 and MitoView™ 633 Apoptosis Kit				
30072	NucView® 488 and RedDot™2 Apoptosis and Necrosis Kit				
30065	Apoptosis & Necrosis Quantitation Kit Plus				
30066	Apoptotic, Necrotic & Healthy Cells Quantitation Kit Plus				
30060	CF®488A Annexin V and 7-AAD Apoptosis Kit				
30061	CF®488A Annexin V and PI Apoptosis Kit				
40061	RedDot™2 Far-Red Nuclear Stain (for dead or fixed cells)				
40083	NucSpot® 470 Green Nuclear Stain (for dead or fixed cells)				
40085	NucSpot® Far-Red, 1000X in DMSO (for dead or fixed cells)				
40084	7-AAD Solution, 1 mg/mL				
30001 JC-1 Mitochondrial Membrane Detection Kit 70005 TMRE, 2mM in DMSO					
		70017	TMRM		
30063	CF®488A TUNEL Assay Apoptosis Detection Kit				
30064	CF®594 TUNEL Assay Apoptosis Detection Kit				
30074	CF®640R TUNEL Assay Apoptosis Detection Kit				
80027	PathoGreen™ Histofluorescent Stain				
32010	Live-or-Dye NucFix™ Red Staining Kit				
32002- 32018	Live-or-Dye™ Fixable Viability Staining Kits				
00025	Staurosporine				
22023	Paraformaldehyde, 4% in PBS, Ready-to-Use Fixative				

Please visit our website at www.biotium.com for information on our life science research products, including probes for monitoring cell viability, cellular stains, Annexin V conjugates, and other bioconjugates.

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