

Product Information

Annexin V

Product List

Product	Cat. No.	Unit Size
Annexin V (His Tag)	29088-100ug	100 ug
	29088	1 mg
Annexin V (No Tag)	29089-100ug	100 ug
	29089	1 mg
	29089-5mg	5 mg

Storage and Handling

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

Reconstitute lyophilized Annexin V with sterile deionized water for a stock solution of 1 mg/mL (buffer components listed above). Mix gently for 30 to 60 minutes at room temperature to dissolve, avoiding vigorous mixing or vortexing. Reconstituted Annexin V 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 conjugating this protein to a dye or other molecule.

Molecular Weight: 37.6 kDa (His Tag), 36.7 kDa (No Tag)

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

Endotoxin Level: < 1 EU/ug, determined by PyroGene® Recombinant Factor C Assay.

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. Annexin V can bind to PS located on the outer leaflet and therefore fluorescently-labeled Annexin V is commonly used as a readout of apoptosis, as well as a probe for staining extracellular vesicles (EVs). 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 is expressed from *E. coli* as a single, non-glycosylated polypeptide chain. Our Annexin V is offered with and without a C-terminal 6X His tag.

Annexin V (His Tag)

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10      20      30      40      50      60
MAQVLRGTVT DFPGFDERAD AETLRKAMKG LGTDEESILT LLTSRSNAQR QEISAAFKTL

70      80      90      100     110     120
FGRDLLDDLK SELTGKFEKL IVALMKPSRL YDAYELKHAL KGAGTNEKVL TEI IASRTPPE

130     140     150     160     170     180
ELRAIKQVYE EEYGSSLEDD VVGDTSGYYQ RMLVVLLQAN RDPDAGIDEA QVEQDAQALF

190     200     210     220     230     240
QAGELKWTGD EEKFTITFGT RSVSHLRKVF DKYMTISGFQ IEETIDRETS GNLEQLLLAV

250     260     270     280     290     300
VKSIRSIPAY LAETLYYAMK GAGTDDHTLI RVMVSRSEID LFNIRKEFRK NFATSLYSMI

310     320     330
KGDTSGDYKK ALLLLCGEDD ENLYFQSHHH HHH
                        TEV site HIS

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Annexin V (No Tag)

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10      20      30      40      50      60
MAQVLRGTVT DFPGFDERAD AETLRKAMKG LGTDEESILT LLTSRSNAQR QEISAAFKTL

70      80      90      100     110     120
FGRDLLDDLK SELTGKFEKL IVALMKPSRL YDAYELKHAL KGAGTNEKVL TEI IASRTPPE

130     140     150     160     170     180
ELRAIKQVYE EEYGSSLEDD VVGDTSGYYQ RMLVVLLQAN RDPDAGIDEA QVEQDAQALF

190     200     210     220     230     240
QAGELKWTGD EEKFTITFGT RSVSHLRKVF DKYMTISGFQ IEETIDRETS GNLEQLLLAV

250     260     270     280     290     300
VKSIRSIPAY LAETLYYAMK GAGTDDHTLI RVMVSRSEID LFNIRKEFRK NFATSLYSMI

310     320
KGDTSGDYKK ALLLLCGEDD ENLYFQ
                        TEV site (cleaved)

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Figure 1. Amino acid sequences for recombinant Annexin V (His Tag), top; and Annexin V (No Tag), bottom. C-terminal TEV protease cleavage site (blue) and 6X His tag (red) are indicated.

Related Products

Cat. No	Product
29003...29085	Annexin V CF® Dye Conjugates
29006...29082	Annexin V Near IR CF® Dye Conjugates
29003R... 29069R	Annexin V CF® Dye Conjugates, Azide-Free, Lyophilized
99902	5X Annexin Binding Buffer (15 mL)
30119-30122	ExoBrite™ Annexin EV Staining Kits
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...41040	NucSpot® Nuclear Stains (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
70076	Aquaphile™ JC-1
30063	CF®488A TUNEL Assay Apoptosis Detection Kit
30064	CF®594 TUNEL Assay Apoptosis Detection Kit
30074	CF®640R TUNEL Assay Apoptosis Detection Kit
32010	Live-or-Dye NucFix™ Red Staining Kit
32002-32018	Live-or-Dye™ Fixable Viability Staining Kits
00025	Staurosporine

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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