**Proteins** 



## **Product** Data Sheet

## LAG-3 Protein, Human (HEK293, Fc)

Cat. No.: HY-P70723

Synonyms: Lymphocyte activation gene 3 protein; LAG3; LAG-3; Protein FDC; CD223

Species: Source: HEK293

P18627 (L23-L450) Accession:

Gene ID: 3902 Molecular Weight: 70-90 kDa

## **PROPERTIES**

AA Sequence	
	LQPGAEVPVV WAQEGAPAQL PCSPTIPLQD LSLLRRAGVT
	WQHQPDSGPP AAAPGHPLAP GPHPAAPSSW GPRPRRYTVL
	SVGPGGLRSG RLPLQPRVQL DERGRQRGDF SLWLRPARRA
	DAGEYRAAVH LRDRALSCRL RLRLGQASMT ASPPGSLRAS
	DWVILNCSFS RPDRPASVHW FRNRGQGRVP VRESPHHHLA
	ESFLFLPQVS PMDSGPWGCI LTYRDGFNVS IMYNLTVLGL
	EPPTPLTVYA GAGSRVGLPC RLPAGVGTRS FLTAKWTPPG
	GGPDLLVTGD NGDFTLRLED VSQAQAGTYT CHIHLQEQQL
	NATVTLAIIT VTPKSFGSPG SLGKLLCEVT PVSGQERFVW
	SSLDTPSQRS FSGPWLEAQE AQLLSQPWQC QLYQGERLLG
	AAVYFTELSS PGAQRSGRAP GALPAGHL
Appearance	Solution.
Formulation	Supplied as a 0.2 μm filtered solution of 20 mM NaH <sub>2</sub> PO <sub>4</sub> , 150 mM NaCl, 0.1 M Arginine, 0.1 M Glu, 10% Glycerol, 0.01%
	Tween 20, 5% Trehalose, pH 7.4.
Endotoxin Level	<1 EU/μg, determined by LAL method.
Reconsititution	N/A.
Character O. Chaladilla	
Storage & Stability	Stored at -80°C for 1 year. It is stable at -20°C for 3 months after opening. It is recommended to freeze aliquots at -80°C for
	extended storage. Avoid repeated freeze-thaw cycles.
Shipping	Shipping with dry ice.

## **DESCRIPTION**

Background LAG-3 (Lymphocyte activation gene 3) protein, an inhibitory receptor present on antigen-activated T-cells, plays a crucial

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role in immune regulation. Upon binding to its major ligand, FGL1, LAG-3 delivers inhibitory signals that negatively regulate the proliferation, activation, effector function, and homeostasis of both CD8(+) and CD4(+) T-cells. Acting in synergy with PDCD1/PD-1, LAG-3 may inhibit antigen-specific T-cell activation, particularly following T-cell receptor (TCR) engagement where it associates with CD3-TCR in the immunological synapse. Beyond its role in T-cell inhibition, LAG-3 is constitutively expressed on a subset of regulatory T-cells (Tregs), contributing to their suppressive function and mediating immune tolerance. Additionally, LAG-3 negatively regulates plasmacytoid dendritic cell (pDCs) activation and, intriguingly, interacts with MHC class II (MHC-II), potentially acting as both a ligand for MHC-II on antigen-presenting cells (APC) and a promoter of APC activation/maturation, thereby influencing Th1 immune response.

Caution: Product has not been fully validated for medical applications. For research use only.

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