

LAG-3 Protein, Human (Biotinylated, HEK293, His-Avi)

Cat. No.:	HY-P72389
Synonyms:	Lymphocyte activation gene 3 protein; Protein FDC; CD223
Species:	Human
Source:	HEK293
Accession:	P18627 (L23-L450)
Gene ID:	3902
Molecular Weight:	60-70 kDa

PROPERTIES

AA Sequence

L Q P L W V A P V K	P L Q P G A E V P V	V W A Q E G A P A Q	L P C S P T I P L Q
D L S L L R R A G V	T W Q H Q P D S G P	P A A A P G H P L A	P G P H P A A P S S
W G P R P R R Y T V	L S V G P G G L R S	G R L P L Q P R V Q	L D E R G R Q R G D
F S L W L R P A R R	A D A G E Y R A A V	H L R D R A L S C R	L R L R L G Q A S M
T A S P P G S L R A	S D W V I L N C S F	S R P D R P A S V H	W F R N R G Q G R V
P V R E S P H H H L	A E S F L F L P Q V	S P M D S G P W G C	I L T Y R D G F N V
S I M Y N L T V L G	L E P P T P L T V Y	A G A G S R V G L P	C R L P A G V G T R
S F L T A K W T P P	G G G P D L L V T G	D N G D F T L R L E	D V S Q A Q A G T Y
T C H I H L Q E Q Q	L N A T V T L A I I	T V T P K S F G S P	G S L G K L L C E V
T P V S G Q E R F V	W S S L D T P S Q R	S F S G P W L E A Q	E A Q L L S Q P W Q
C Q L Y Q G E R L L	G A A V Y F T E L S	S P G A Q R S G R A	P G A L P A G H L

Appearance Lyophilized powder.

Formulation Lyophilized from a 0.2 µm filtered solution of PBS, pH 7.4.

Endotoxin Level <1 EU/µg, determined by LAL method.

Reconstitution It is not recommended to reconstitute to a concentration less than 100 µg/mL in ddH₂O. For long term storage it is recommended to add a carrier protein (0.1% BSA, 5% HSA, 10% FBS or 5% Trehalose).

Storage & Stability Stored at -20°C for 2 years. After reconstitution, it is stable at 4°C for 1 week or -20°C for longer (with carrier protein). It is recommended to freeze aliquots at -20°C or -80°C for extended storage.

Shipping Room temperature in continental US; may vary elsewhere.

DESCRIPTION

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

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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