

LAG-3 Protein, Human (HEK293, mFc)

Cat. No.:	HY-P70735
Synonyms:	Lymphocyte activation gene 3 protein; LAG3; LAG-3; Protein FDC; CD223
Species:	Human
Source:	HEK293
Accession:	P18627 (L23-L450)
Gene ID:	3902
Molecular Weight:	Approximately 90.0 kDa

PROPERTIES

AA Sequence

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.

Tel: 609-228-6898

Fax: 609-228-5909

E-mail: tech@MedChemExpress.com

Address: 1 Deer Park Dr, Suite Q, Monmouth Junction, NJ 08852, USA