

## LAG-3 Protein, Mouse (419a.a, HEK293, His)

Cat. No.:	HY-P78720
Synonyms:	Lymphocyte activation gene 3 protein; LAG3; LAG-3; Protein FDC; CD223
Species:	Mouse
Source:	HEK293
Accession:	Q61790 (G24-L442)
Gene ID:	16768
Molecular Weight:	53-80 kDa

### PROPERTIES

<b>AA Sequence</b>	<p>G P G K E L P V V W    A Q E G A P V H L P    C S L K S P N L D P    N F L R R G G V I W</p> <p>Q H Q P D S G Q P T    P I P A L D L H Q G    M P S P R Q P A P G    R Y T V L S V A P G</p> <p>G L R S G R Q P L H    P H V Q L E E R G L    Q R G D F S L W L R    P A L R T D A G E Y</p> <p>H A T V R L P N R A    L S C S L R L R V G    Q A S M I A S P S G    V L K L S D W V L L</p> <p>N C S F S R P D R P    V S V H W F Q G Q N    R V P V Y N S P R H    F L A E T F L L L P</p> <p>Q V S P L D S G T W    G C V L T Y R D G F    N V S I T Y N L K V    L G L E P V A P L T</p> <p>V Y A A E G S R V E    L P C H L P P G V G    T P S L L I A K W T    P P G G G P E L P V</p> <p>A G K S G N F T L H    L E A V G L A Q A G    T Y T C S I H L Q G    Q Q L N A T V T L A</p> <p>V I T V T P K S F G    L P G S R G K L L C    E V T P A S G K E R    F V W R P L N N L S</p> <p>R S C P G P V L E I    Q E A R L L A E R W    Q C Q L Y E G Q R L    L G A T V Y A A E S</p> <p>S S G A H S A R R I    S G D L K G G H L</p>
<b>Biological Activity</b>	<p>1. Immobilized Mouse LAG-3, His Tag at 5 µg/mL (100 µL/well) can bind Biotinylated Mouse FGL1. The ED<sub>50</sub> for this effect is 0.5983 µg/mL.</p> <p>2. Immobilized Mouse LAG3 at 5 µg/mL can bind Human FGL1. The EC<sub>50</sub> is 309.8-461.1 ng/mL.</p>
<b>Appearance</b>	Lyophilized powder.
<b>Formulation</b>	Lyophilized a 0.22 µm filtered solution of 20 mM PB, 150 mM NaCl, pH 7.4 or 20 mM Tris-HCl, 0.5 M NaCl, 6% Trehalose, pH 8.0 or PBS, pH 7.4.
<b>Endotoxin Level</b>	<1 EU/µg, determined by LAL method.
<b>Reconstitution</b>	It is not recommended to reconstitute to a concentration less than 100 µg/mL in ddH <sub>2</sub> O.
<b>Storage &amp; Stability</b>	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.
<b>Shipping</b>	Room temperature in continental US; may vary elsewhere.

## DESCRIPTION

### Background

LAG-3 (Lymphocyte activation gene 3) protein is an inhibitory receptor expressed on antigen-activated T-cells, delivering inhibitory signals upon binding to ligands such as FGL1. Serving as a major ligand of LAG3, FGL1 is responsible for LAG3's T-cell inhibitory function. Following T-cell receptor (TCR) engagement, LAG3 associates with CD3-TCR in the immunological synapse, directly inhibiting T-cell activation. LAG3 may synergistically inhibit antigen-specific T-cell activation with PDCD1/PD-1, possibly acting as a coreceptor for PD-1. It negatively regulates the proliferation, activation, effector function, and homeostasis of both CD8(+) and CD4(+) T-cells. Constitutively expressed on a subset of regulatory T-cells (Tregs), LAG3 contributes to their suppressive function, mediating immune tolerance. Additionally, LAG3 acts as a negative regulator of plasmacytoid dendritic cell (pDCs) activation and binds to MHC class II (MHC-II), possibly functioning as a ligand for MHC-II on antigen-presenting cells, thereby promoting APC activation/maturation and driving Th1 immune responses.

**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](mailto:tech@MedChemExpress.com)

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