Catalog # LA3-H5222



#### Synonym

LAG3,CD223,FDC

#### Source

Human LAG-3, His Tag(LA3-H5222) is expressed from human 293 cells (HEK293). It contains AA Leu 23 - Leu 450 (Accession # <u>P18627-1</u>). Predicted N-terminus: Leu 23

# **Molecular Characterization**

LAG-3(Leu 23 - Leu 450) Poly-his P18627-1

This protein carries a polyhistidine tag at the C-terminus, and has a calculated MW of 47.1 kDa. The predicted N-terminus is Leu 23. The reducing (R) protein migrates as 55-60 kDa when calibrated against <u>Star Ribbon Pre-stained Protein</u> <u>Marker</u> in SDS-PAGE due to glycosylation.

## Endotoxin

Less than 1.0 EU per  $\mu g$  by the LAL method.

# Purity

>95% as determined by SDS-PAGE.

>95% as determined by SEC-MALS.

#### Formulation

Lyophilized from 0.22  $\mu$ m filtered solution in PBS, pH7.4 with trehalose as protectant.

Contact us for customized product form or formulation.

#### Reconstitution

Please see Certificate of Analysis for specific instructions.

For best performance, we strongly recommend you to follow the reconstitution protocol provided in the CoA.

#### Storage

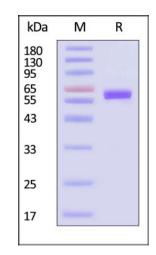
For long term storage, the product should be stored at lyophilized state at -20°C or lower.

Please avoid repeated freeze-thaw cycles.

This product is stable after storage at:

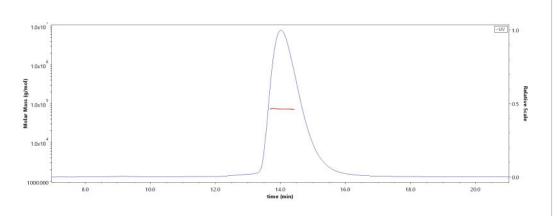
- -20°C to -70°C for 12 months in lyophilized state;
- -70°C for 3 months under sterile conditions after reconstitution.

## **SDS-PAGE**



Human LAG-3, His Tag on SDS-PAGE under reducing (R) condition. The gel was stained with Coomassie Blue. The purity of the protein is greater than 95% (With <u>Star Ribbon Pre-stained Protein Marker</u>).

# SEC-MALS



The purity of Human LAG-3, His Tag (Cat. No. LA3-H5222) is more than 95% and the molecular weight of this protein is around 55-75 kDa verified by SEC-MALS.

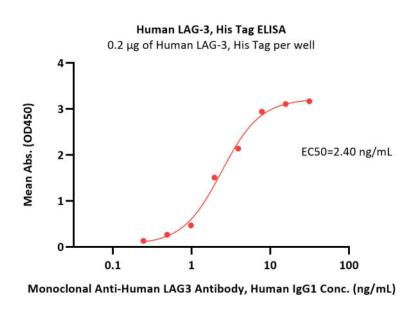


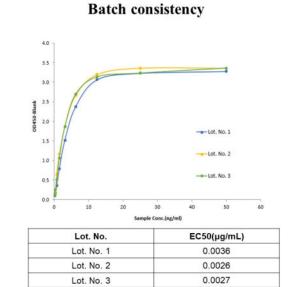
**Bioactivity-ELISA** 





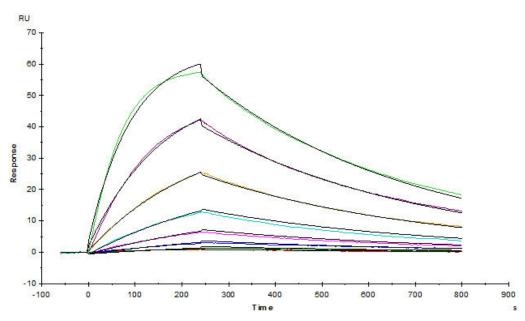
#### Catalog # LA3-H5222





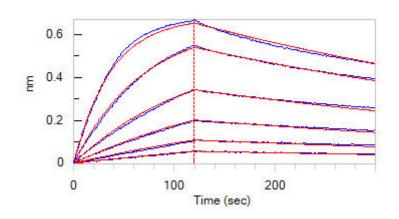
Immobilized Human LAG-3, His Tag (Cat. No. LA3-H5222) at 2  $\mu$ g/mL (100  $\mu$ L/well) can bind Monoclonal Anti-Human LAG3 Antibody, Human IgG1 with a linear range of 0.2-4 ng/mL (QC tested).





Anti-LAG-3 MAb (Human IgG1) captured on CM5 chip via Anti-Human IgG Fc antibodies surface, can bind Human LAG-3, His Tag (Cat. No. LA3-H5222) with an affinity constant of 4.57 nM as determined in a SPR assay (Biacore T200) (Routinely tested).

**Bioactivity-BLI** 



Loaded Anti-LAG-3 MAb (Human IgG1) on AHC Biosensor, can bind Human LAG-3, His Tag (Cat. No. LA3-H5222) with an affinity constant of 7.47 nM as determined in BLI assay (ForteBio Octet Red96e) (Routinely tested).



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# Background

Lymphocyte activation gene 3 protein (LAG3) is also known as CD antigen CD223 and protein FDC, which belongs to immunoglobulin (Ig) superfamily and contains 4 extracellular Ig-like domains. The LAG3 gene contains 8 exons. The sequence data, exon/intron organization, and chromosomal localization all indicate a close relationship of LAG3 to CD4. LAG3 /CD223 involved in lymphocyte activation. LAG3 /CD223 binds to HLA class-II antigens.

## **Clinical and Translational Updates**



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