ARG70271
Human CD223 / LAG3 recombinant protein (His-tagged, C-ter)

Package: 100 µg
Store at: -20°C

Summary

Product Description	HEK293 expressed, His-tagged (C-ter) Human CD223 / LAG3 recombinant protein.
Tested Reactivity	Hu
Tested Application	Binding, ELISA, SDS-PAGE
Target Name	CD223 / LAG3
Species	Human
A.A. Sequence	Leu23 - Leu450 of Human CD223 / LAG3 (NP_002277.4) with 6X His tag at the C - terminus.
Expression System	HEK293
Alternate Names	CD antigen CD223; CD223; Protein FDC; Lymphocyte activation gene 3 protein; LAG-3

Application Instructions

Application Note	Binding activity test: Measured by its binding ability in a functional ELISA. Immobilized Recombinant Human LAG3 at 2µg/ml (100 µl/well) can bind Anti-LAG3 antibody with a linear range of 13-40 ng/ml. Binding activity test: Measured by its binding ability in a functional ELISA. Immobilized Human FGL1 at 5 µg/ml (100 µl/well) can bind recombinant Human LAG3, the EC50 of Human LAG3 is 0.32 µg/ml.

Properties

Form	Powder
Purification Note	0.22 µm filter sterilized. Endotoxin level is 95% (by SDS-PAGE)
Buffer	PBS (pH 7.4)
Reconstitution	Reconstitute to a concentration of 0.1 - 0.5 mg/ml in sterile distilled water.
Storage instruction	For long term, lyophilized protein should be stored at -20°C or -80°C. After reconstitution, aliquot and store at -20°C for up to one month, at 2-8°C for up to one week. Storage in frost free freezers is not recommended. Avoid repeated freeze/thaw cycles. Suggest spin the vial prior to opening.
Note	For laboratory research only, not for drug, diagnostic or other use.

Bioinformation

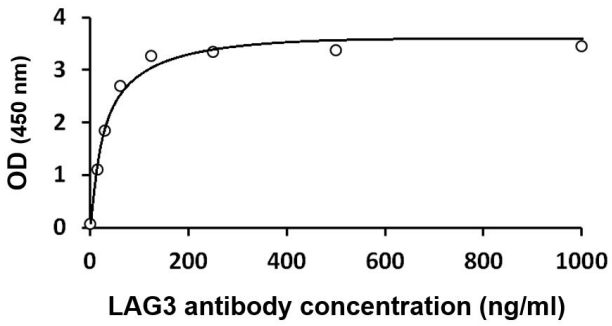
Gene Symbol	LAG3
Gene Full Name	lymphocyte-activation gene 3
Background	Lymphocyte-activation protein 3 belongs to Ig superfamily and contains 4 extracellular Ig-like domains. The LAG3 gene contains 8 exons. The sequence data, exon/intron organization, and chromosomal localization all indicate a close relationship of LAG3 to CD4. [provided by RefSeq, Jul 2008]
Function	Lymphocyte activation gene 3 protein: Inhibitory receptor on antigen activated T-cells (PubMed:7805750, PubMed:8647185, PubMed:20421648). Delivers inhibitory signals upon binding to ligands, such as FGL1 (By similarity). FGL1 constitutes a major ligand of LAG3 and is responsible for LAG3 T-cell inhibitory function (By similarity). Following TCR engagement, LAG3 associates with

CD3-TCR in the immunological synapse and directly inhibits T-cell activation (By similarity). May inhibit antigen-specific T-cell activation in synergy with PDCD1/PD-1, possibly by acting as a coreceptor for PDCD1/PD-1 (By similarity). Negatively regulates the proliferation, activation, effector function and homeostasis of both CD8(+) and CD4(+) T-cells (PubMed:7805750, PubMed:8647185, PubMed:20421648). Also mediates immune tolerance: constitutively expressed on a subset of regulatory T-cells (Tregs) and contributes to their suppressive function (By similarity). Also acts as a negative regulator of plasmacytoid dendritic cell (pDCs) activation (By similarity). Binds MHC class II (MHC-II); the precise role of MHC-II-binding is however unclear (PubMed:8647185).

[Secreted lymphocyte activation gene 3 protein]: May function as a ligand for MHC class II (MHC-II) on antigen-presenting cells (APC), promoting APC activation/maturation and driving Th1 immune response. [UniProt]

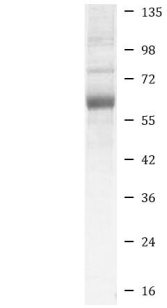
Calculated Mw	57 kDa
Cellular Localization	Membrane; Single-pass type I membrane protein. [UniProt]

Images



ARG70271 Human CD223 / LAG3 recombinant protein (ECD) (His-tagged, C-ter) ELISA image

ELISA: The plate was coated with ARG70271 Human CD223 / LAG3 recombinant protein (ECD) (His-tagged, C-ter) at 2 µg/ml (100 µl/well). Samples were detected with serially diluted anti-LAG3 antibody.



Human CD223 / LAG3 recombinant protein (ECD) (His-tagged, C-ter)

ARG70271 Human CD223 / LAG3 recombinant protein (ECD) (His-tagged, C-ter) SDS-PAGE image

SDS-PAGE analysis of ARG70271 Human CD223 / LAG3 recombinant protein (ECD) (His-tagged, C-ter).