

LAG-3 Protein, Human, Recombinant (hFc)

General Information

Synonyms:	lymphocyte-activation gene 3;CD223;LAG-3
Protein Construction:	A DNA sequence encoding the human LAG3 (NP_002277.4) (Met1-Leu450) was expressed with the Fc region of human IgG1 at the C-terminus. Predicted N terminal: Leu 23
Species:	Human
Expression Host:	HEK293 Cells
Accession:	P18627-1
Molecular Weight:	72.9 kDa (predicted); 84.19 kDa (reducing condition, due to glycosylation)

QC Testing

Biological Activity:	Immobilized LAG3 Protein, Human, Recombinant (ECD, hFc Tag) at 2 µg/mL (100 µL/well) can bind Anti-LAG3(BMS)-IgG4 Antibody (Relatlimab), the EC50 is 8-40 ng/mL.
Purity:	≥ 95 % as determined by SDS-PAGE. ≥ 85 % as determined by SEC-HPLC.
Endotoxin:	< 1.0 EU/µg of the protein as determined by the LAL method.
Formulation:	Lyophilized from a solution filtered through a 0.22 µm filter, containing 20 mM NaH ₂ PO ₄ , 150 mM NaCl, 0.1M Arg, 0.1M Glu, 10% glycerol, 0.01% tween20, pH 7.4. Typically, a mixture containing 5% to 8% trehalose, mannitol, and 0.01% Tween 80 is incorporated as a protective agent before lyophilization.

Preparation and Storage

Reconstitution:

A Certificate of Analysis (CoA) containing reconstitution instructions is included with the products. Please refer to the CoA for detailed information.

Stability & Storage:

It is recommended to store recombinant proteins at -20°C to -80°C for future use. Lyophilized powders can be stably stored for over 12 months, while liquid products can be stored for 6-12 months at -80°C. For reconstituted protein solutions, the solution can be stored at -20°C to -80°C for at least 3 months. Please avoid multiple freeze-thaw cycles and store products in aliquots.

Actual storage temperature shall be subject to the COA.

Shipping:

In general, lyophilized powders are shipped with blue ice, while solutions are shipped with dry ice.

Protein Background

LAG3 (Lymphocyte Activating 3) is a Protein Coding gene. 2 alternatively spliced human isoforms have been reported. LAG3, also known as CD223 and Lymphocyte activation gene 3, belongs to the immunoglobulin (Ig) superfamily. The LAG3 gene contains 8 exons. It is selectively expressed in activated T and NK cells. LAG3 contains 4 extracellular Ig-like domains and has a negative regulatory function in T cells. It also acts as a new marker of T

cell-induced B cell activation. As a soluble molecule, LAG3 activates antigen-presenting cells through MHC class II signaling, leading to increased antigen-specific T-cell responses in vivo. Diseases associated with LAG3 include Smoldering Myeloma and Kyphoscoliotic Heart Disease. Cancer Immunotherapy Co-inhibitory Immune Checkpoint Targets Immune Checkpoint Immune Checkpoint Targets Immunotherapy Targeted Therapy

Reference

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