Data Sheet (Cat.No.TMPY-05130)

TargetMol

LAG-3 Protein, Human, Recombinant, Biotinylated

General Information

Synonyms:	lymphocyte-activation gene 3;CD223;LAG-3
Protein Construction:	A DNA sequence encoding the LAG3 (P18627) (Met1-Arg440) was expressed. The expressed protein was biotinylated in vitro. Predicted N terminal: Leu 23
Species:	Human
Expression Host:	HEK293 Cells
Accession:	P18627-1
Molecular Weight:	45.3 kDa (predicted); 55.6 kDa (reducing condition, due to glycosylation)

QC Testing

Biological Activity:	Immobilized Human LAG3, Biotinylated at 2 μg/mL (100 μL/well) can bind Human FGL1 (hFc Tag), the EC50 is 150-700 ng/mL.
Purity:	> 90 % as determined by SDS-PAGE.
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 PBS, pH7.4. 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 ImmunotherapyCo-inhibitory Immune Checkpoint TargetsImmune CheckpointImmune Checkpoint TargetsImmunotherapyTargeted Therapy

Reference

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