Recombinant LAG3 protein (His tag)

Catalog Number	539818
Synonyms	LAG-3; CD antigen CD223; sLAG-3
Species	Human
Expression System	E. coli
Accession	P18627
Molecular Weight	Predictes a molecular mass of 47.84 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 48 kDa band.

Product Information

Sequence Region	23-450
Form	Lyophilized powder
Formulation	Lyophilized from sterile PBS, pH 7.4
Purity	>87%, by SDS-PAGE with Coomassie Brilliant Blue staining.
Endotoxin	Not tested.
Activity	Not tested.
Stability	Samples are stable for up to twelve months from date of receipt at -70℃
Protein Construction	DNA encoding 23-450 aa (P18627) were fused with 6His tag.

Storage & Handling

Reconstitution	Reconstitute at 0.25 μg/μl in sterile water for short-term storage. Reconstitution with 50% glycerol solution is recommended for longer term storage (see Stability and Storage for more details). If a different concentration is needed for your purposes please adjust the reconstitution volume as required (please note: the ion concentration of the final solution will vary according to the volume used). Note: Centrifuge vial before opening. When reconstituting, gently pipet and wash down the sides of the vial to ensure full recovery of the protein into solution.
Storage	Store it under sterile conditions at -20℃ to -80℃. It is recommended that the protein be aliquoted for optimal storage. Avoid repeated freeze-thaw cycles.
Shipping	In general, recombinant proteins are provided as lyophilized powder which are shipped at ambient temperature. Bulk packages of recombinant proteins are provided as frozen liquid. They are shipped out with blue ice unless customers require otherwise.

Description

Description	Recombinant Human LAG-3 (Lymphocyte Activation Gene 3 Protein) Fragment (aa 23-450) is a high-purity protein designed for immunological research. This fragment encompasses the full extracellular Ig-like domains (V-type and three C2-type), making it an ideal tool for studying T-cell inhibitory mechanisms, ligand interactions, and immune checkpoint functions in a controlled in vitro setting. Lymphocyte Activation Gene 3 (LAG-3), also known as CD223, is an inhibitory immune checkpoint receptor primarily expressed on activated T-cells. It delivers inhibitory signals upon binding to ligands such as FGL1, directly suppressing T-cell activation following TCR engagement. LAG-3 functions synergistically with PD-1 to negatively regulate T-cell proliferation, activation, and effector functions, and is constitutively expressed on regulatory T-cells (Tregs) where it contributes to immune tolerance. The full-length protein is a single-pass type I membrane protein, while a cleaved secreted form (sLAG-3) may function as a ligand for MHC class II on antigen-presenting cells. This recombinant fragment corresponds to the extracellular region containing all Ig-like domains critical for ligand binding and receptor function.