10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

Anti-LAG3 / CD223 Reference Antibody (relatlimab)

Recombinant Antibody
Catalog # APR10029

Product Information

Application	Functional assay, Kinetics (SPR), Kinetics (BLI), FACS, E, FTA
Primary Accession	P18627
Clonality	Monoclonal
Isotype	IgG4SP
Calculated MW	57449

Additional Information

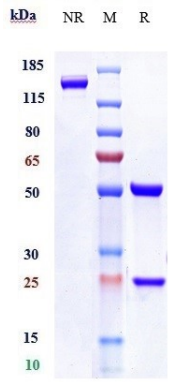
Target/Specificity	LAG3 / CD223
Endotoxin	
Conjugation	Unconjugated
Expression system	CHO
Format	Purified monoclonal antibody supplied in PBS, pH6.0, without preservative.This antibody is purified through a protein A column.

Protein Information

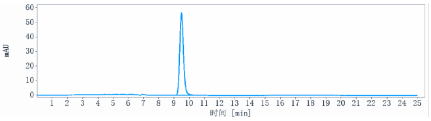
Name	LAG3 {ECO:0000303|PubMed:35761082, ECO:0000312|HGNC:HGNC:6476}
Function	[Lymphocyte activation gene 3 protein]: Inhibitory receptor on antigen activated T-cells (PubMed:20421648, PubMed:35761082, PubMed:7805750, PubMed:8647185). Delivers inhibitory signals upon binding to ligands, such as MHC class II, its main ligand present at the surface of antigen-presenting cells (APCs), and FGL1, which is secreted by hepatocytes and certain types of tumor cells (PubMed:30580966, PubMed:32920841, PubMed:35761082, PubMed:39671469, PubMed:7589152, PubMed:8647185, PubMed:9159144). Ligand-binding initiates a signaling that inhibits the T-cell receptor (TCR) in the immunological synapse, preventing T-cell activation (PubMed:40101708). Mechanistically, ligand-binding promotes (1) ubiquitination of the KIEELE motif, unleashing the RRFSALE motif from the membrane and (2) leading to the formation of condensates with the TCR component CD3E, thereby disrupting the association between CD3E and LCK and preventing TCR activation (PubMed:40101708, PubMed:40592325). May inhibit antigen-specific T-cell activation in synergy with PDCD1/PD-1 (By similarity). Negatively regulates the proliferation, activation, effector function and homeostasis of both CD8(+) and CD4(+) T-cells (PubMed:20421648, PubMed:7805750, PubMed:8647185). 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).
Cellular Location	[Lymphocyte activation gene 3 protein]: Cell membrane; Single-pass type I membrane protein. Note=Clusters on the T-cell surface following ligand-binding
Tissue Location	Primarily expressed in activated T-cells and a subset of natural killer (NK) cells.

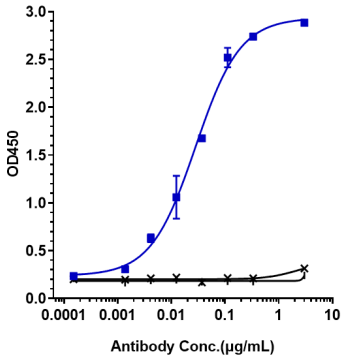
Images



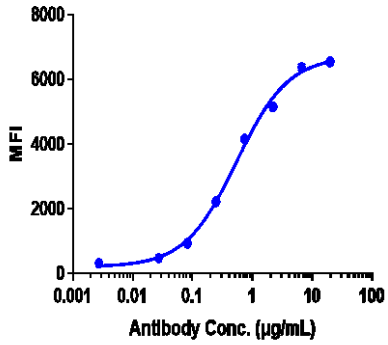
Anti- Human LAG3(Relatlimab) on SDS-PAGE under reducing (R) condition. The purity of the protein is greater than 95%.



The purity of Anti- Human LAG3(Relatlimab)is 100%, determined by SEC-HPLC.

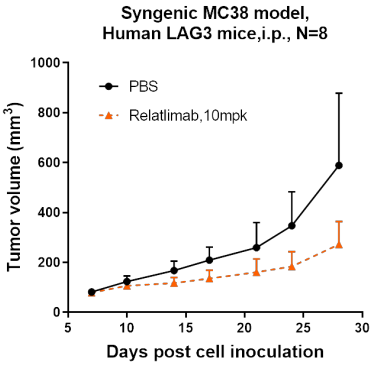


Immobilized human LAG3 (His Tag, 2 μg/mL) can bind to Anti- Human LAG3(Relatlimab)with an EC50 of 0.02812 ug/mL.



Human LAG3-expressing CHO cells were stained with Anti- Human LAG3(Relatlimab), with isotype and secondary-only controls. Flow analysis showed specific binding of the antibody, with an EC50 of 0.5464 ug/mL.

Anti- Human LAG3(Relatlimab) inhibited the tumor growth of MC38 on Human LAG3 mice. The result showed significant anti-tumor effects, with an tumor inhibition rate (TGI) of 53.8% at 10 mpk at D28.



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