LAG-3 Antibody / Lymphocyte activation gene 3 protein / CD223 [clone 31L58] (FY12697)

Catalog No.	Formulation	Size
FY12697	Rabbit IgG in phosphate buffered saline, pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol, 0.4-0.5mg/ml BSA	100 ul

Recombinant RABBIT MONOCLONAL

Bulk quote request

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Availability	2-3 weeks
Species Reactivity	Human
Format	Liquid
Clonality	Recombinant Rabbit Monoclonal
Isotype	Rabbit IgG
Clone Name	31L58
Purity	Affinity-chromatography
Buffer	Rabbit IgG in phosphate buffered saline, pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol, 0.4-0.5mg/ml BSA.
UniProt	P18627
Applications	Immunohistochemistry : 1:50-1:200 Immunocytochemistry/Immunofluorescence : 1:50-1:200
Limitations	This LAG-3 antibody is available for research use only.
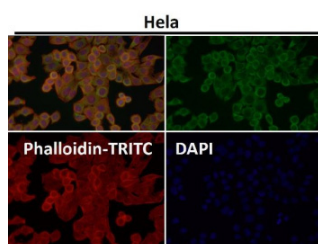
Immunofluorescent analysis using the LAG-3 antibody (green) at 1:150 dilution.
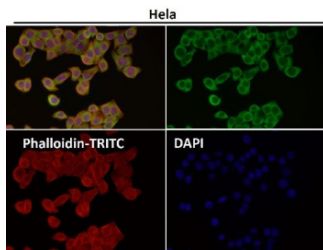
Immunofluorescent analysis using the LAG-3 antibody (green) at 1:50 dilution.

Description

LAG-3 antibody detects lymphocyte activation gene 3 protein, an immune checkpoint receptor encoded by the LAG3 gene. LAG-3 is expressed on activated T cells, natural killer cells, and plasmacytoid dendritic cells. It binds MHC class II molecules and negatively regulates T cell proliferation and activation. This checkpoint function maintains immune tolerance and prevents autoimmunity, but also contributes to immune evasion in cancer.

LAG-3 antibody is widely applied in immunology, oncology, and translational research. In cancer, LAG-3 expression marks exhausted T cells within the tumor microenvironment. In chronic infection, sustained LAG-3 expression dampens antiviral responses. By detecting LAG-3, researchers can evaluate immune exhaustion, tolerance mechanisms, and therapeutic checkpoint blockade strategies.

Flow cytometry with LAG-3 antibody identifies exhausted or regulatory T cell subsets. Immunohistochemistry maps LAG-3 expression in tumors and inflamed tissues, while immunofluorescence highlights surface distribution on lymphocytes. Western blotting confirms expression in activated immune cell lysates. These methods enable detailed characterization of immune checkpoint biology.

LAG-3 has therapeutic relevance as a target for immune checkpoint inhibitors. Antibodies blocking LAG-3 restore T cell function and enhance antitumor immunity. Clinical trials are evaluating LAG-3 blockade alone and in combination with PD-1 inhibitors. By applying LAG-3 antibody, scientists can monitor expression as a biomarker for patient selection and therapeutic response.

LAG-3 is also involved in autoimmune disease and transplantation. It modulates T regulatory cell function and dendritic cell activation, influencing tolerance and graft survival. Studying LAG-3 with antibody based methods provides insights into balancing immunity and tolerance in clinical settings.

LAG-3 antibody from NSJ Bioreagents provides strong specificity for detecting this checkpoint receptor. Its performance across multiple assays supports both basic and translational research in immunology and cancer therapy.

Application Notes

Optimal dilution of the LAG-3 antibody should be determined by the researcher.

Immunogen

A synthesized peptide derived from human CD223 was used as the immunogen for the LAG-3 antibody.

Storage

Store the LAG-3 antibody at -20oC.