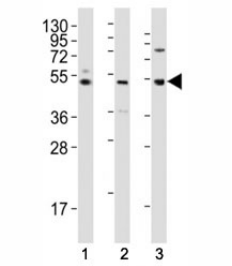
LAG3 Antibody / Lymphocyte Activation Gene 3 Antibody (F50003)

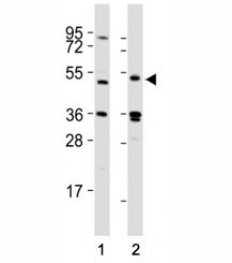
Catalog No.	Formulation	Size
F50003-0.4ML	In 1X PBS, pH 7.4, with 0.09% sodium azide	0.4 ml
F50003-0.08ML	In 1X PBS, pH 7.4, with 0.09% sodium azide	0.08 ml

Bulk quote request

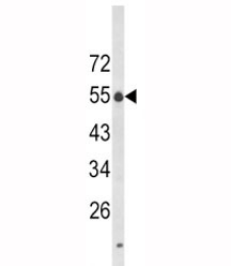
Species Reactivity	Human
Format	Antigen affinity purified
Host	Rabbit
Clonality	Polyclonal (rabbit origin)
Isotype	Rabbit Ig
Purity	Antigen affinity
UniProt	P18627
Applications	Western blot: 1:1000 IHC (Paraffin): 1:10-1:50
Limitations	This LAG3 Antibody / Lymphocyte Activation Gene 3 Antibody is available for research use only.



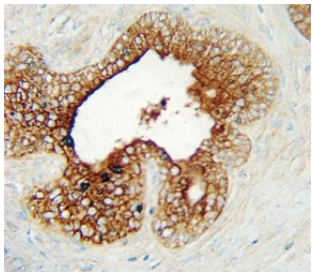
LAG3 Antibody by WB in human cell and tissue lysates. Western blot analysis of human K562 cell lysate (lane 1), liver tissue lysate (lane 2), and ovary tissue lysate (lane 3) using LAG3 Antibody at 1:2000 dilution. The predicted molecular weight of LAG3 is approximately 54 kDa.



LAG3 Antibody by WB in human 293T cells and spleen. Western blot analysis of human 293T cell lysate (lane 1) and spleen tissue lysate (lane 2) using LAG3 Antibody at 1:2000 dilution. The predicted molecular weight of LAG3 is approximately 54 kDa.



LAG3 Antibody by WB in human K562 cells. Western blot analysis of human K562 cell lysate using LAG3 Antibody. The predicted molecular weight of LAG3 is approximately 54 kDa.



LAG3 Antibody by IHC in human prostate carcinoma. Immunohistochemistry of formalin-fixed, paraffin-embedded human prostate carcinoma tissue using LAG3 Antibody. Brown immunoreactivity is prominent in glandular epithelial structures, with staining outlining numerous cells and extending into portions of the cytoplasm. Hematoxylin counterstains nuclei blue. The staining pattern is predominantly associated with the epithelial compartment in the displayed section.

Description

LAG3 Antibody / Lymphocyte Activation Gene 3 Antibody recognizes lymphocyte activation gene 3 protein, also known as CD223, an inhibitory immune checkpoint receptor encoded by the LAG3 gene. LAG3 belongs to the immunoglobulin superfamily and contains four extracellular immunoglobulin-like domains, a transmembrane region, and a cytoplasmic tail involved in regulating immune cell activity. Structurally related to CD4, LAG3 participates in the control of T cell activation, proliferation, and functional responses. Its inhibitory activity helps maintain immune homeostasis while limiting excessive or prolonged immune stimulation.

LAG3 is expressed on activated CD4+ and CD8+ T lymphocytes, regulatory T cells, and selected natural killer and dendritic cell populations. Its expression increases following sustained antigenic stimulation and is frequently associated with dysfunctional or exhausted T cell states. LAG3 interacts with several ligands, including major histocompatibility complex class II molecules and fibrinogen-like protein 1 (FGL1). These interactions contribute to the regulation of immune responses, although their functional consequences depend on cellular context and receptor-associated signaling mechanisms.

In cancer immunology, LAG3 is an important marker of immune checkpoint activity within the tumor microenvironment. Tumor-infiltrating lymphocytes frequently coexpress LAG3 and programmed cell death protein 1 (PD-1), particularly under conditions of persistent antigen exposure. This coexpression is associated with impaired effector function and reduced antitumor immune activity. Therapeutic strategies targeting LAG3 have therefore emerged as an important approach to immune checkpoint inhibition, including combinations with PD-1 blockade designed to restore T cell responsiveness.

LAG3 also participates in immune regulation during chronic infection, autoimmunity, and inflammatory disease. Persistent antigen stimulation can promote sustained receptor expression, contributing to the progressive reduction of T cell effector activity. Conversely, inhibitory checkpoint signaling can protect tissues from excessive immune-mediated damage. These opposing functions illustrate the importance of LAG3 in balancing protective immunity against immune tolerance and inflammatory injury.

Research into LAG3 continues to clarify its ligand interactions, regulatory mechanisms, and relationship with other inhibitory receptors. NSJ Bioreagents offers this LAG3 Antibody for investigating immune checkpoint biology, T cell exhaustion, and the mechanisms governing lymphocyte activation and suppression in cancer and inflammatory disease.

Explore our CD Antibodies for additional research tools targeting immune cell surface markers, checkpoint receptors, and proteins involved in lymphocyte activation and immune regulation.

Application Notes

Titration of the LAG3 Antibody / Lymphocyte Activation Gene 3 Antibody may be required due to differences in protocols and secondary/substrate sensitivity.

Immunogen

A portion of amino acids 103-132 from the human protein was used as the immunogen for this LAG3 antibody.

Storage

Aliquot the LAG3 antibody and store frozen at -20oC or colder. Avoid repeated freeze-thaw cycles.

Alternate Names

CD223 antibody, LAG-3 antibody, Lymphocyte Activation Protein 3 antibody, Lymphocyte Activation Gene 3 Protein antibody

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