

LAG3 Antibody (Center)

Affinity Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP6987c

Product Information

Application WB, IHC-P, FC, E

Primary Accession P18627

Reactivity Human, Mouse, Rat

Host Rabbit
Clonality Polyclonal
Isotype Rabbit IgG
Clone Names RB21775
Calculated MW 57449
Antigen Region 103-132

Additional Information

Gene ID 3902

Other Names Lymphocyte activation gene 3 protein, LAG-3, Protein FDC, CD223, LAG3, FDC

Target/Specificity This LAG3 antibody is generated from rabbits immunized with a KLH

conjugated synthetic peptide between 103-132 amino acids from the Central

region of human LAG3.

Dilution WB~~1:2000 IHC-P~~1:100~500 FC~~1:25 E~~Use at an assay dependent

concentration.

Format Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide.

This antibody is purified through a protein A column, followed by peptide

affinity purification.

Storage Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store

at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions LAG3 Antibody (Center) is for research use only and not for use in diagnostic

or therapeutic procedures.

Protein Information

Name LAG3 (HGNC:6476)

Synonyms FDC

Function Lymphocyte activation gene 3 protein: Inhibitory receptor on antigen

activated T-cells (PubMed: 20421648, PubMed: 7805750, PubMed: 8647185).

Delivers inhibitory signals upon binding to ligands, such as FGL1 (By similarity). FGL1 constitutes a major ligand of LAG3 and is responsible for LAG3 T-cell inhibitory function (By similarity). Following TCR engagement, LAG3 associates with CD3-TCR in the immunological synapse and directly inhibits T-cell activation (By similarity). May inhibit antigen-specific T-cell activation in synergy with PDCD1/PD-1, possibly by acting as a coreceptor for 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). Binds MHC class II (MHC-II); the precise role of MHC-II-binding is however unclear (PubMed:8647185).

Cellular Location

[Lymphocyte activation gene 3 protein]: Cell membrane; Single-pass type I membrane protein

Tissue Location

Primarily expressed in activated T-cells and a subset of natural killer (NK) cells.

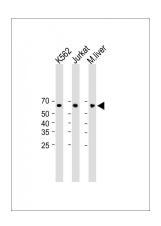
Background

Lymphocyte-activation protein 3 belongs to Ig superfamily and contains 4 extracellular Ig-like domains.

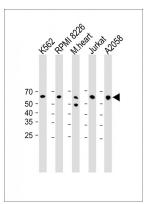
References

Smyth, D.J., et.al., BMC Med. Genet. 7, 20 (2006)

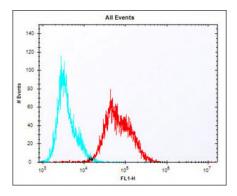
Images



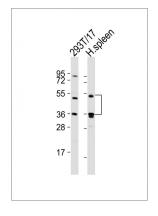
All lanes: Anti-LAG3 Antibody (Center) at 1:1000 dilution Lane 1: K562 whole cell lysate Lane 2: Jurkat whole cell lysate Lane 3: M. liver whole cell lysate Lysates/proteins at 20 µg per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated (ASP1615) at 1/15000 dilution. Observed band size: 57kDa Blocking/Dilution buffer: 5% NFDM/TBST.



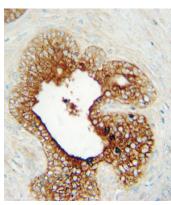
All lanes: Anti-LAG3 Antibody (Center) at 1:1000 dilution Lane 1: K562 whole cell lysate Lane 2: RPMI 8226 whole cell lysate Lane 3: Mouse heart tissue lysate Lane 4: Jurkat whole cell lysate Lane 5: A2058 whole cell lysate Lysates/proteins at 20 µg per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated (ASP1615) at 1/15000 dilution. Observed band size: 57kDa Blocking/Dilution buffer: 5% NFDM/TBST.



Overlay histogram showing Jurkat cells stained with AP6987C (red line). The cells were fixed with 2% paraformaldehyde (10 min) and then permeabilized with 90% methanol for 10 min. The cells were then icubated in 2% bovine serum albumin to block non-specific protein-protein interactions followed by the antibody (AP6987C, 1:25 dilution) for 60 min at 37°C. The secondary antibody used was Alexa Fluor® 488 goat anti-rabbit IgG (H+L) (1583138) at 1/400 dilution for 40 min at 37°C. Isotype control antibody (blue line) was rabbit IgG1 (1µg/1x10^6 cells) used under the same conditions. Acquisition of >10, 000 events was performed.



All lanes: Anti-LAG3 Antibody (Center) at 1:2000 dilution Lane 1: 293T/17 whole cell lysates Lane 2: human spleen lysates Lysates/proteins at 20 µg per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/10000 dilution Predicted band size: 57 kDa Blocking/Dilution buffer: 5% NFDM/TBST.



LAG3 Antibody (Center) (Cat. #AP6987c) immunohistochemistry analysis in formalin fixed and paraffin embedded human prostate carcinoma followed by peroxidase conjugation of the secondary antibody and DAB staining. This data demonstrates the use of the LAG3 Antibody (Center) for immunohistochemistry. Clinical relevance has not been evaluated.

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.