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LAG3 antibody (N-term)

Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP22459a

Product Information

Application	WB, E
Primary Accession	P18627
Reactivity	Human, Mouse
Host	Rabbit
Clonality	polyclonal
Isotype	Rabbit Ig
Clone Names	R03070
Calculated MW	57449

Additional Information

Gene ID	3902
Other Names	Lymphocyte activation gene 3 protein, LAG-3, CD223, Secreted lymphocyte activation gene 3 protein, sLAG-3, LAG3 (HGNC:6476), FDC
Target/Specificity	This antibody is generated from a rabbit immunized with a KLH conjugated synthetic peptide between amino acids from human.
Dilution	WB~~1:1000 E~~Use at an assay dependent concentration.
Format	Purified polyclonal antibody supplied in PBS with 0.05% (V/V) Proclin 300. 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 (N-term) is for research use only and not for use in diagnostic or therapeutic procedures.

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.

Background

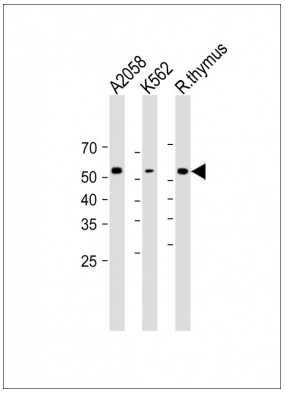
Lymphocyte activation gene 3 protein: Inhibitory receptor on antigen activated T-cells (PubMed: 20421648, PubMed:7805750, PubMed:8647185). Delivers inhibitory signals upon binding to ligands, such as FGL1 (By similarity). FGL1 constitutes a major ligand of LAG3 and is responsible for LAG3 T-cell inhibitory 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).

References

Triebel F.,et al.J. Exp. Med. 171:1393-1405(1990).
Triebel F.,et al.Submitted (SEP-2001) to the EMBL/GenBank/DDBJ databases.
Ota T.,et al.Nat. Genet. 36:40-45(2004).
Scherer S.E.,et al.Nature 440:346-351(2006).
Mural R.J.,et al.Submitted (SEP-2005) to the EMBL/GenBank/DDBJ databases.

Images

All lanes: Anti-LAG3 antibody (N-term) at 1:1000 dilution Lane 1: A2058 whole cell lysate Lane 2: K562 whole cell lysate Lane 3: Rat thymus 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: 57 KDa Blocking/Dilution buffer: 5% NFDM/TBST.



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