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Polyclonal Antibody to Lymphocyte Activation Gene 3 (LAG3)

Lymphocyte Activation Gene 3
Catalog # AP74682

Product Information

Application	WB
Primary Accession	Q61790
Reactivity	Mouse
Host	Rabbit
Clonality	Polyclonal
Calculated MW	56978

Additional Information

Gene ID	16768
Other Names	CD223; Protein FDC
Target/Specificity	Mus musculus (Mouse)
Dilution	WB~~Western blotting: 0.5-2 □g/mL; Immunohistochemistry: 5-20 □g/mL; Immunocytochemistry: 5-20 □g/mL; Optimal working dilutions must be determined by end user.
Format	PBS, pH7.4, containing 0.02% NaN3, 50% glycerol.
Storage	Store at -20 °C.Stable for 12 months from date of receipt

Protein Information

Name	Lag3 {ECO:0000303|PubMed:8602528, ECO:0000312|MGI:MGI:106588}
Function	[Lymphocyte activation gene 3 protein]: Inhibitory receptor on antigen activated T-cells (PubMed:12209638, PubMed:12421911, PubMed:12672063, PubMed:15100286, PubMed:15634887, PubMed:30580966, PubMed:35413245, PubMed:35761082, PubMed:38483996, PubMed:39209860). 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:12209638, PubMed:12421911, PubMed:30349037, PubMed:30580966, PubMed:35413245, PubMed:35761082, PubMed:39209860). Ligand-binding initiates a signaling that inhibits the T-cell receptor (TCR) in the immunological synapse, preventing T-cell activation (PubMed:12209638, PubMed:12421911, PubMed:12672063,

PubMed:15100286, PubMed:15634887). 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 (PubMed:21300912). Negatively regulates the proliferation, activation, effector function and homeostasis of both CD8(+) and CD4(+) T-cells (PubMed:12209638, PubMed:12421911, PubMed:12672063, PubMed:15100286, PubMed:15634887). Also mediates immune tolerance: constitutively expressed on a subset of regulatory T-cells (Tregs) and contributes to their suppressive function (PubMed:15485628). Also acts as a negative regulator of plasmacytoid dendritic cell (pDCs) activation (PubMed:19201841).

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 CD4(+) and CD8(+) T-cells (PubMed:12209638). Also expressed in a subset of regulatory T- cells (Tregs), such as natural CD4(+)CD25(+) Tregs (PubMed:15485628) Also expressed on plasmacytoid dendritic cells (pDCs) (PubMed:19201841).

Images

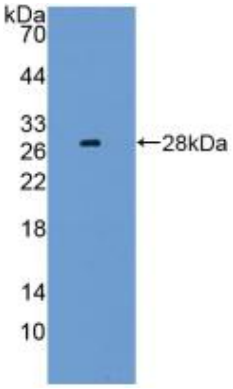


Figure. Western Blot; Sample: Recombinant LAG3, Mouse.

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