10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

Anti-CD223-Biotin-labled

Catalog # AP101809

Product Information

Application	FC, IF/IC
Primary Accession	Q61790
Reactivity	Mouse
Clonality	Monoclonal
Calculated MW	56978

Additional Information

Gene ID	16768
Other Names	FDC; Lymphocyte activation gene 3 protein; LAG-3; Protein FDC; CD223
Target/Specificity	Recognizes mouse CD223
Dilution	FC~~1:10~50 IF/IC~~N/A
Format	Rat IgG1 kappa. Liquid in PBS, pH 7.3, 0.2% BSA, and 0.02% sodium azide.
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).

Background

Biotin-labled rat monoclonal antibody to CD223

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