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Anti-TIGIT-Biotin-labled

Catalog # AP102041

Product Information

Application	FC, IF/IC
Primary Accession	Q495A1
Reactivity	Human
Clonality	Monoclonal
Calculated MW	26319

Additional Information

Gene ID	201633
Other Names	VSIG9; VSTM3; T-cell immunoreceptor with Ig and ITIM domains; V-set and immunoglobulin domain-containing protein 9; V-set and transmembrane domain-containing protein 3
Target/Specificity	Recognizes human TIGIT
Dilution	FC~~1:10~50 IF/IC~~N/A
Format	Mouse IgG3 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	TIGIT
Synonyms	VSIG9, VSTM3
Function	Inhibitory receptor that plays a role in the modulation of immune responses. Suppresses T-cell activation by promoting the generation of mature immunoregulatory dendritic cells (PubMed:19011627). Upon binding to its ligands PVR/CD155 or NECTIN2/CD112, which are expressed on antigen-presenting cells, sends inhibitory signals to the T-cell or NK cell. Mechanistically, interaction with ligand leads to phosphorylation of the cytoplasmic tail by Src family tyrosine kinases such as FYN or LCK, allowing subsequent binding to adapter GRB2 and SHIP1/INPP5D. In turn, inhibits PI3K and MAPK signaling cascades (PubMed:23154388). In addition, associates with beta-arrestin-2/ARRB2 to recruit SHIP1/INPP5D that suppresses autoubiquitination of TRAF6 and subsequently inhibits NF- kappa-B signaling pathway (PubMed:24817116). Also acts as a receptor for NECTIN4 to inhibit NK cell cytotoxicity (PubMed:32503945).
Cellular Location	Cell membrane; Single-pass type I membrane protein. Note=Clustered to the

	immunological synapse where it disrupts granule polarization and cytotoxicity of NK cells once engaged with PVR.
Tissue Location	Expressed at low levels on peripheral memory and regulatory CD4+ T-cells and NK cells and is up-regulated following activation of these cells (at protein level)

Background

Biotin-labled mouse monoclonal antibody to TIGIT

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