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TIGIT Antibody (C-term)

Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP10616b

Product Information

Application	WB, FC, E
Primary Accession	Q495A1
Other Accession	NP_776160.2
Reactivity	Human, Mouse
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Clone Names	RB28353
Calculated MW	26319
Antigen Region	205-233

Additional Information

Gene ID	201633
Other Names	T-cell immunoreceptor with Ig and ITIM domains, V-set and immunoglobulin domain-containing protein 9, V-set and transmembrane domain-containing protein 3, TIGIT, VSIG9, VSTM3
Target/Specificity	This TIGIT antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 205-233 amino acids from the C-terminal region of human TIGIT.
Dilution	WB~~1:1000 FC~~1:10~50 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	TIGIT Antibody (C-term) is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

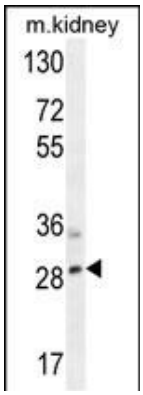
Name	TIGIT
Synonyms	VSIG9, VSTM3

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)

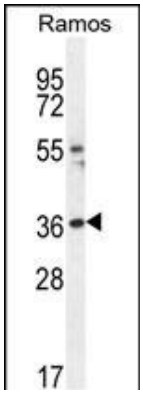
Background

Binds with high affinity to the poliovirus receptor (PVR) which causes increased secretion of IL10 and decreased secretion of IL12B and suppresses T cell activation by promoting the generation of mature immunoregulatory dendritic cells.

Images

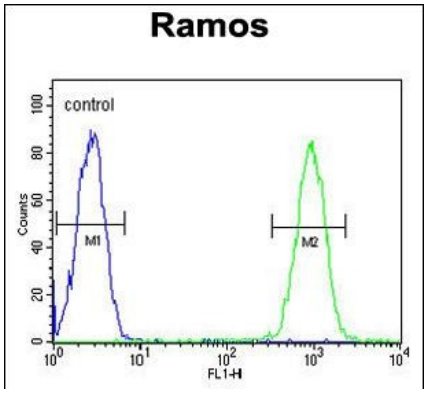


TIGIT Antibody (C-term) (Cat. #AP10616b) western blot analysis in mouse kidney tissue lysates (35ug/lane).This demonstrates the TIGIT antibody detected the TIGIT protein (arrow).



TIGIT Antibody (C-term) (Cat. #AP10616b) western blot analysis in Ramos cell line lysates (35ug/lane).This demonstrates the TIGIT antibody detected the TIGIT protein (arrow).

TIGIT Antibody (C-term) (Cat. #AP10616b) flow cytometric analysis of Ramos cells (right histogram) compared to a



negative control cell (left histogram).FITC-conjugated goat-anti-rabbit secondary antibodies were used for the analysis.