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Anti-TIGIT Reference Antibody (tiragolumab)

Recombinant Antibody
Catalog # APR10059

Product Information

Application	Functional assay, Kinetics (SPR), Kinetics (BLI), FACS, E, FTA
Primary Accession	Q495A1
Reactivity	Cynomolgus, Human, Mouse
Clonality	Monoclonal
Isotype	IgG1
Calculated MW	26319

Additional Information

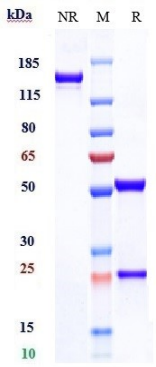
Target/Specificity	TIGIT
Endotoxin	
Conjugation	Unconjugated
Expression system	CHO
Format	Purified monoclonal antibody supplied in PBS, pH6.0, without preservative.This antibody is purified through a protein A column.

Protein Information

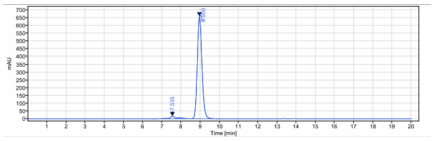
Name	TIGIT
Synonyms	VSIG9, VSTM3
Function	Inhibitory receptor that plays a role in the modulation of immune responses. Suppresses T-cell activation by promoting the generation of mature immunoregulatory dendritic cells (PubMed:19011627). Upon binding to its ligands PVR/CD155 or NECTIN2/CD112, which are 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)

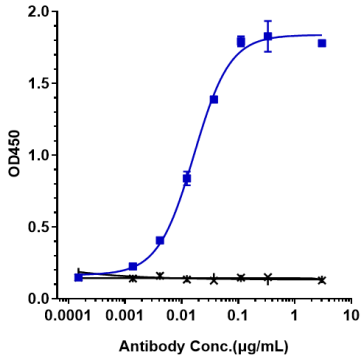
Images



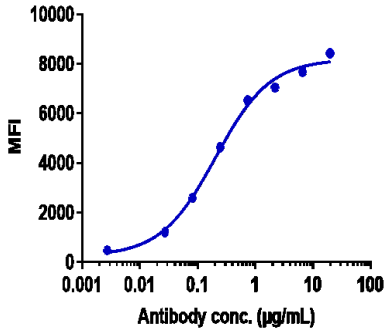
Anti-TIGIT Reference Antibody (tiragolumab) on SDS-PAGE under reducing (R) condition. The purity of the protein is greater than 95%.



The purity of Anti-TIGIT Reference Antibody (tiragolumab) is 95.79%, determined by SEC-HPLC.

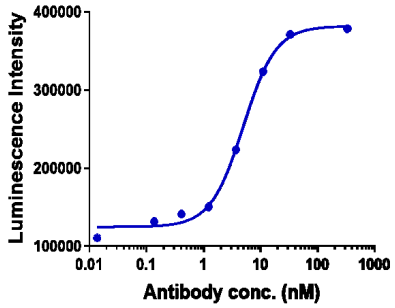


Immobilized human TIGIT His at 2 ug/mL can bind Anti-TIGIT Reference Antibody (tiragolumab), EC50=0.01643 ug/mL.



Human TIGIT HEK293 cells were stained with Anti-TIGIT Reference Antibody (tiragolumab) and negative control protein respectively, washed and then followed by PE and analyzed with FACS, EC50=0.2053 ug/mL.

Anti-TIGIT Reference Antibody (tiragolumab)-induced TIGIT Luciferase activity was evaluated using hu-TIGIT-CD226-NFAT-Jurkat,Reporter Cell. The EC50 was approximately 4.978nM.



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