

**Anti-TIGIT Reference Antibody (tiragolumab)
Recombinant Antibody
Catalog # APR10059**

Specification

Anti-TIGIT Reference Antibody (tiragolumab) - Product Information

Application	FC, E, FTA
Primary Accession	O495A1
Reactivity	Cynomolgus, Human, Rabbit
Clonality	Monoclonal
Isotype	IgG1
Calculated MW	148.66 KDa

Anti-TIGIT Reference Antibody (tiragolumab) - Additional Information

Target/Specificity
TIGIT

Endotoxin
< 0.001EU/ µg,determined by LAL method.

Conjugation
Unconjugated

Expression system
CHO Cell

Format
Purified monoclonal antibody supplied in PBS, pH6.0, without preservative.This antibody is purified through a protein A column.

Anti-TIGIT Reference Antibody (tiragolumab) - 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). Acts also 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

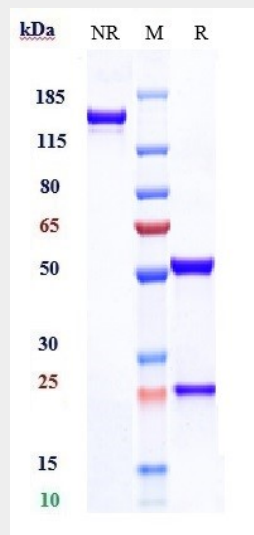
Expressed at low levels on peripheral memory and regulatory CD4+ T-cells and NK cells and is up-regulated following activation of these cells (at protein level)

Anti-TIGIT Reference Antibody (tiragolumab) - Protocols

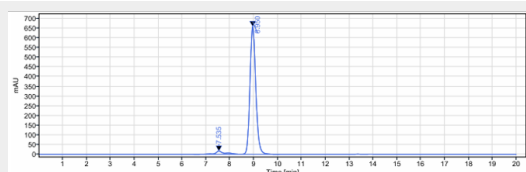
Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

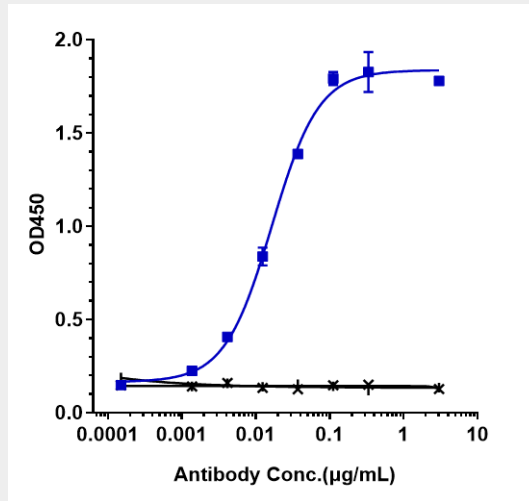
Anti-TIGIT Reference Antibody (tiragolumab) - Images



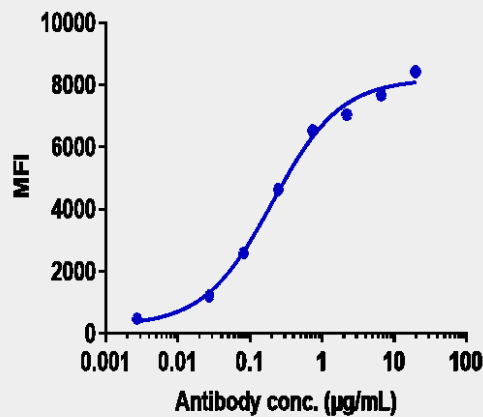
Anti-TIGIT Reference Antibody (tiragolumab) on SDS-PAGE under reducing (R) condition. The gel was stained with Coomassie Blue. The purity of the protein is greater than 95%



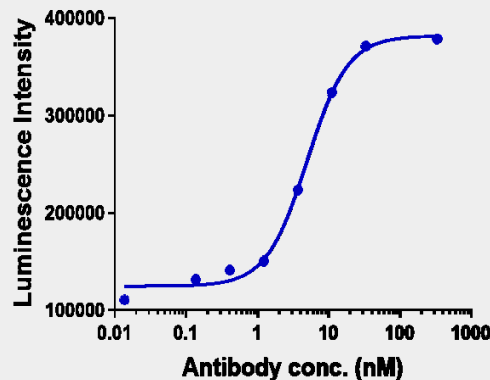
The purity of Anti-TIGIT Reference Antibody (tiragolumab) is more than 95.79% ,determined by SEC-HPLC.



Immobilized human TIGIT His at 2 µg/mL can bind Anti-TIGIT Reference Antibody (tiragolumab) $EC_{50}=0.01643$ µg/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, $EC_{111}=0.2053$ µg/mL



Anti-TIGIT Reference Antibody (tiragolumab)-induced TIGIT Luciferase activity was evaluated using hu-TIGIT-CD226-NFAT-Jurkat, Reporter Cell. The EC_{50} was approximately 4.978nM.