For Research Use Only

TIGIT Recombinant antibody

Catalog Number:83545-1-RR



Basic Information

Catalog Number: GenBank Accession Number:

83545-1-RR NM_173799.4 GeneID (NCBI):

100ul, Concentration: 1000 ug/ml by 201633 Nanodrop:

UNIPROT ID: Source Q495A1-1 Rabbit Full Name:

Isotype: T cell immunoreceptor with Ig and IgG

ITIM domains

Calculated MW: 26 kDa Observed MW: 44 kDa

CloneNo.: 240423D3 Recommended Dilutions:

Purification Method:

Protein A purification

WB 1:1000-1:5000 IHC 1:500-1:2000 IF-P 1:50-1:500 IF/ICC 1:125-1:500

Applications

Tested Applications:

WB, IHC, IF/ICC, IF-P, ELISA

Species Specificity:

human, mouse, rat

Note-IHC: suggested antigen retrieval with TE buffer pH 9.0; (*) Alternatively, antigen retrieval may be performed with citrate buffer pH 6.0

Positive Controls:

WB: Jurkat cells, NK-92 cells, NIH/3t3 cells, RAW 264.7

cells, EL-4 cells, rat spleen tissue

IHC: human tonsillitis tissue, IF-P: mouse spleen tissue, IF/ICC: Jurkat cells,

Background Information

TIGIT (T-cell immunoreceptor with Ig and ITIM domains), also known as VSIG9 or VSTM3, is an immune receptor expressed on T cells, including Treg and memory subsets, as well as on NK cells (PMID: 19011627). It contains an immunoglobulin variable domain, a transmembrane domain and an immunoreceptor tyrosine-based inhibitory motif (ITIM). TIGIT binds to poliovirus receptor (PVR, also called CD155) with high affinity, and also to PVRL2 (CD112) with lower affinity. The interaction of TIGIT with PVR on dendritic cells increases the secretion of IL-10 and $decreases the secretion of proinflammatory \ cytokine \ and \ suppresses \ T-cell \ activation \ by \ promoting \ the \ generation$ of mature immunoregulatory dendritic cells. TIGIT can inhibit NK cytotoxicity directly through its ITIM (PMID: 19815499).

Storage

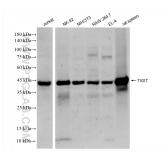
Store at -20°C. Stable for one year after shipment.

PBS with 0.02% sodium azide and 50% glycerol pH 7.3.

Aliquoting is unnecessary for -20°C storage

*** 20ul sizes contain 0.1% BSA

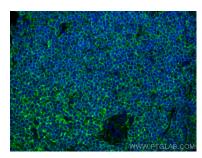
Selected Validation Data



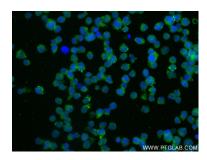
Various lysates were subjected to SDS PAGE followed by western blot with 83545-1-RR (TIGIT antibody) at dilution of 1:3000 incubated at room temperature for 1.5 hours.



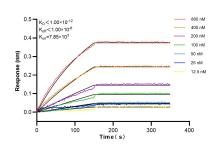
Immunohistochemical analysis of paraffinembedded human tonsillitis tissue slide using 83545-1-RR (TIGIT antibody) at dilution of 1:1000 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Immunofluorescent analysis of (4% PFA) fixed paraffin-embedded mouse spleen tissue using TIGIT antibody (83545-1-RR, Clone: 240423D3) at dilution of 1:200 and CoraLite® 488-Conjugated Goat Anti-Rabbit IgG(H+L) (SA00013-2). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Immunofluorescent analysis of (4% PFA) fixed Jurkat cells using TIGIT antibody (83545-1-RR, Clone: 240423D3) at dilution of 1:250 and CoraLite®488-Conjugated Affini Pure Goat Anti-Rabbit IgG(H+L) (SA00013-2).



Biolayer interferometry (BLI) kinetic assays of 83545-1-RR against Human TIGIT were performed. The affinity constant is below 1 pM.