For Research Use Only

TIGIT Recombinant monoclonal antibody

Catalog Number:83545-1-RR 1 Pub

1 Publications



Basic Information

Catalog Number: 83545-1-RR Concentration: 1000 ug/ml Source:

Rabbit Isotype: IgG

Q495A1-1
Full Name:
T cell immunoreceptor with Ig and ITIM domains

Calculated MW: 26 kDa Observed MW: 44 kDa

NM_173799.4

GeneID (NCBI):

UNIPROT ID:

201633

GenBank Accession Number:

Purification Method: Protein A purification

CloneNo.: 240423D3

Recommended Dilutions: 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 Cited Species: human

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:

IF/ICC: Jurkat cells,

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,

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).

Notable Publications

Author	Pubmed ID	Journal	Application
Xudong Xing	40215980	Cancer Cell	

Storage

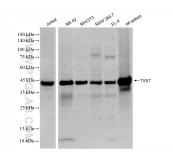
Storage:

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

PBS with 0.02% sodium azide and 50% glycerol, pH7.3

Aliquoting is unnecessary for -20°C storage

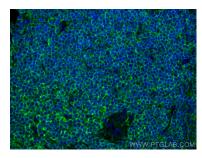
Selected Validation Data



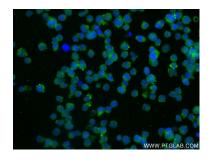
Various lysates were subjected to SDS PAGE followed by western blot with 83545-1-RR (TIGIT antibody) at dilution of 1:3000 incubated at room temperature for 1.5 hours.



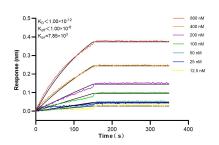
Immunohistochemical analysis of paraffinembedded human tonsillitis tissue slide using 83545-1-RR (TIGIT antibody) at dilution of 1:1000 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



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.