

For Research Use Only

# TIGIT Recombinant antibody, PBS Only (Capture)

Catalog Number: 83545-1-PBS



## Basic Information

<b>Catalog Number:</b> 83545-1-PBS	<b>GenBank Accession Number:</b> NM_173799.4	<b>Purification Method:</b> Protein A purification
<b>Size:</b> 100ug, Concentration: 1 mg/ml by Nanodrop;	<b>GeneID (NCBI):</b> 201633	<b>CloneNo.:</b> 240423D3
<b>Source:</b> Rabbit	<b>UNIPROT ID:</b> Q495A1-1	
<b>Isotype:</b> IgG	<b>Full Name:</b> T cell immunoreceptor with Ig and ITIM domains	
	<b>Calculated MW:</b> 26 kDa	
	<b>Observed MW:</b> 44 kDa	

## Applications

**Tested Applications:**  
WB, IHC, IF/ICC, IF-P, Cytometric bead array, Sandwich ELISA, Indirect ELISA, Sample test

**Species Specificity:**  
human, mouse, rat

## Product Information

83545-1-PBS targets TIGIT as part of a matched antibody pair:

MP00528-2: 83545-1-PBS capture and 83545-4-PBS detection (validated in Cytometric bead array, Sandwich ELISA)

Unconjugated rabbit recombinant monoclonal antibody in PBS only (BSA and azide free) storage buffer at a concentration of 1 mg/mL, ready for conjugation. Created using Proteintech's proprietary in-house recombinant technology. Recombinant production enables unrivalled batch-to-batch consistency, easy scale-up, and future security of supply.

This conjugation ready format makes antibodies ideal for use in many applications including: ELISAs, multiplex assays requiring matched pairs, mass cytometry, and multiplex imaging applications. Antibody use should be optimized by the end user for each application and assay.

## 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

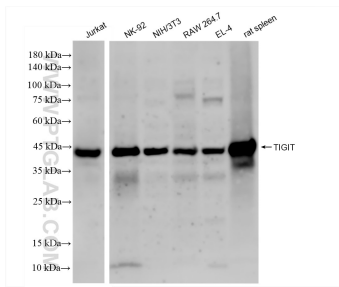
**Storage:**  
Store at -80°C.

**Storage Buffer:**  
PBS Only

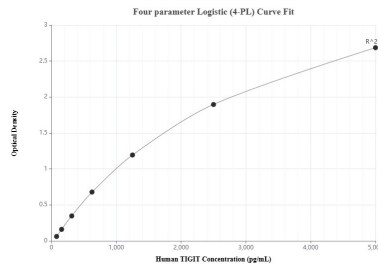
For technical support and original validation data for this product please contact:  
T: 1 (888) 4PTGLAB (1-888-478-4522) (toll free in USA), or 1(312) 455-8498 (outside USA) E: proteintech@ptglab.com W: ptglab.com

**This product is exclusively available under Proteintech Group brand and is not available to purchase from any other manufacturer.**

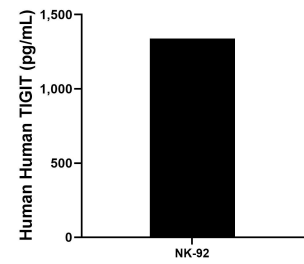
## Selected Validation Data



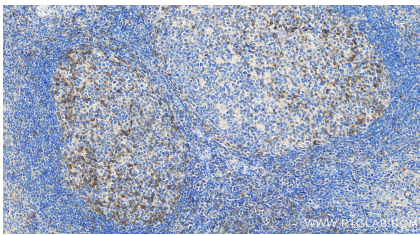
Various lysates were subjected to SDS PAGE followed by western blot with 83545-1-RR (TIGIT antibody) at dilution of 1:3000 incubated at room temperature for 1.5 hours. This data was developed using the same antibody clone with 83545-1-PBS in a different storage buffer formulation.



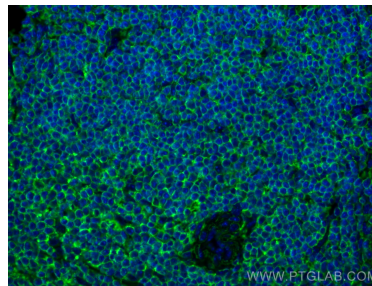
Sandwich ELISA standard curve of MP00528-2, Human TIGIT Recombinant Matched Antibody Pair - PBS only. 83545-1-PBS was coated to a plate as the capture antibody and incubated with serial dilutions of standard Eg0749. 83545-4-PBS was HRP conjugated as the detection antibody. Range: 78.1-5000 pg/mL



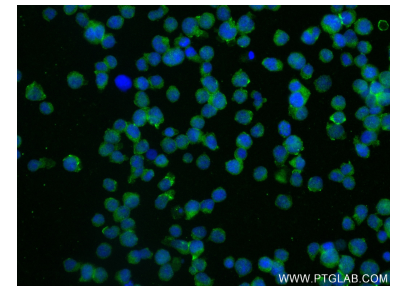
The mean TIGIT concentration was determined to be 1,338.3 pg/mL in NK-92 cell extract based on a 2.0 mg/mL extract load.



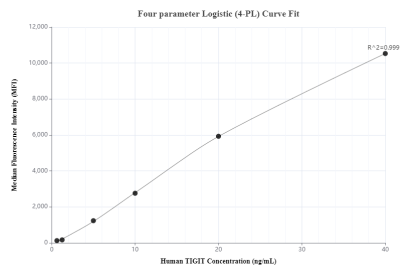
Immunohistochemical analysis of paraffin-embedded human tonsillitis tissue slide using 83545-1-RR (TIGIT antibody) at dilution of 1:1000 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0). This data was developed using the same antibody clone with 83545-1-PBS in a different storage buffer formulation.



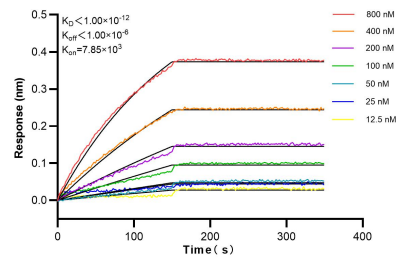
Immunofluorescent analysis of (4% PFA) fixed paraffin-embedded mouse spleen tissue using TIGIT antibody (83545-1-RR, Clone: 240423D3) at dilution of 1:200 and CoraLite@488-Conjugated Goat Anti-Rabbit IgG(H+L) (SA00013-2). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0). This data was developed using the same antibody clone with 83545-1-PBS in a different storage buffer formulation.



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 AffiniPure Goat Anti-Rabbit IgG(H+L) (SA00013-2). This data was developed using the same antibody clone with 83545-1-PBS in a different storage buffer formulation.



Cytometric bead array standard curve of MP00528-2, TIGIT Recombinant Matched Antibody Pair, PBS Only. Capture antibody: 83545-1-PBS. Detection antibody: 83545-4-PBS. Standard: Eg0749. Range: 0.625-40 ng/mL



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