

Rabbit anti-Mouse, Rat Tigit Polyclonal Antibody | anti-Tigit antibody

Anti-Tigit Antibody

CATALOG #	HOST	REACTIVITY	APPLICATIONS
AAA125629	Rabbit	Mouse, Rat	ELISA, Flow Cytometry, Functional Assay, Immunohistochemistry, Western Blot

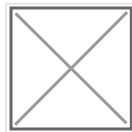
PRODUCT SYNONYMS

Tigit; Polyclonal Antibody; Anti-Tigit Antibody; Vstm3; T-cell immunoreceptor with Ig and ITIM domains; V-set and transmembrane domain-containing protein 3; T cell immunoreceptor with Ig and ITIM domains; anti-Tigit antibody

PRODUCT SPECIFICATIONS

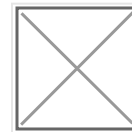
Host	Rabbit
Reactivity	Mouse, Rat
Clonality	Polyclonal
Isotype	Rabbit IgG
Specificity	Rabbit IgG polyclonal antibody for Tigit detection.
Purity/Purification	Immunogen affinity purified.
Form/Format	Lyophilized. Each vial contains 4mg Trehalose, 0.9mg NaCl, 0.2mg Na2HPO4, 0.005mg NaN3.
Applicable Applications for anti-Tigit antibody	ELISA (Direct ELISA), FCM/FACS (Flow Cytometry), IHC (Immunohistochemistry), WB (Western Blot)
Immunogen	E Coli-derived mouse Tigit recombinant protein (Position: T29-G249).
Reconstitution	Add 0.2ml of distilled water will yield a concentration of 500ug/ml.
Preparation and Storage	Store at -20 degree C for one year. After reconstitution, at 4 degree C for one month. It can also be aliquotted and stored frozen at -20 degree C for a longer time. Avoid repeated freezing and thawing.

IMAGES



FCM/FACS (Flow Cytometry)

Figure 3. Flow Cytometry analysis of RAW264. 7 cells using anti-Tigit antibody (AAA125629). Overlay histogram showing RAW264. 7 cells stained with AAA125629 (Blue line). The cells were blocked with 10% normal goat serum. And then incubated with rabbit anti-Tigit Antibody (AAA125629, 1µg/1x106 cells) for 30 min at 20 degree C. DyLight488 conjugated goat anti-rabbit IgG (5-10µg/1x106 cells) was used as secondary antibody for 30 minutes at 20 degree C. Isotype control antibody (Green line) was rabbit IgG (1µg/1x106) used under the same conditions. Unlabelled sample (Red line) was also used as a control.



IHC (Immunohistochemistry)

Figure 2. IHC analysis of Tigit using anti-Tigit antibody (AAA125629). Tigit was detected in paraffin-embedded section of mouse spleen tissue. Heat mediated antigen retrieval was performed in EDTA buffer (pH8. 0, epitope retrieval solution). The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 2µg/ml rabbit anti-Tigit Antibody (AAA125629) overnight at 4 degree C. Biotinylated goat anti-rabbit IgG was used as secondary antibody and incubated for 30 minutes at 37 degree C. The tissue section was developed using Streptavidin-Biotin-Complex (SABC) with DAB as the chromogen.



WB (Western Blot)

Figure 1. Western blot analysis of Tigit using anti-Tigit antibody (AAA125629). Electrophoresis was performed on a 5-20% SDS-PAGE gel at 70V (Stacking gel) / 90V (Resolving gel) for 2-3 hours. The sample well of each lane was loaded with 50ug of sample under reducing conditions. Lane 1: rat spleen tissue lysates Lane 2: rat plasma lysates Lane 3: mouse spleen tissue lysates. After Electrophoresis, proteins were transferred to a Nitrocellulose membrane at 150mA for 50-90 minutes. Blocked the membrane with 5% Non-fat Milk/ TBS for 1.5 hour at RT. The membrane was incubated with rabbit anti-Tigit antigen affinity purified polyclonal antibody (Catalog # AAA125629) at 0.5 µg/mL overnight at 4 degree C, then washed with TBS-0.1% Tween 3 times with 5 minutes each and probed with a goat anti-rabbit IgG-HRP secondary antibody at a dilution of 1:5000 for 1.5 hour at RT. The signal is developed using an Enhanced Chemiluminescent detection (ECL) kit with Tanon 5200 system. A specific band was detected for Tigit at approximately 30KD. The expected band size for Tigit is at 30KD.

ADDITIONAL INFORMATION

Related Product Information for anti-Tigit antibody	TIGIT (also called T cell immunoreceptor with Ig and ITIM domains) is an immune receptor present on some T cells and Natural Killer Cells (NK). This gene encodes a member of the PVR (poliovirus receptor) family of immunoglobulin proteins. The product of this gene is expressed on several classes of T cells including follicular B helper T cells (TFH). The protein has been shown to bind PVR with high affinity; this binding is thought to assist interactions between TFH and dendritic cells to regulate T cell dependent B cell responses.
References	1. Gross, M. B. Personal Communication. Baltimore, Md. 6/16/2009. 2. Stanietzky, N., Simic, H., Arapovic, J., Toporik, A., Levy, O., Novik, A., Levine, Z., Beiman, M., Dassa, L., Achdout, H., Stern-Ginossar, N., Tsukerman, P., Jonjic, S., Mandelboim, O. The interaction of TIGIT with PVR and PVRL2 inhibits human NK cell cytotoxicity. Proc. Nat. Acad. Sci. 106: 17858-17863, 2009. 3. Yu, X., Harden, K., Gonzalez, L. C., Francesco, M., Chiang, F., Irving, B., Tom, I., Ivelja, S., Refino, C. J., Clark, H., Eaton, D., Grogan, J. L. The surface protein TIGIT suppresses T cell activation by promoting the generation of mature immunoregulatory dendritic cells. Nature Immun. 10: 48-57, 2009.

NCBI AND UNIPROT INFORMATION

NCBI GI #	224493410
NCBI GeneID	100043314
UniProt Accession #	P86176
Molecular Weight	26,959 Da
NCBI Official Full Name	T-cell immunoreceptor with Ig and ITIM domains
NCBI Official Synonym Full Names	T cell immunoreceptor with Ig and ITIM domains
NCBI Official Symbol	Tigit
NCBI Official Synonym Symbols	Vstm3
NCBI Protein Information	T-cell immunoreceptor with Ig and ITIM domains
UniProt Protein Name	T-cell immunoreceptor with Ig and ITIM domains
UniProt Gene Name	Tigit

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.