

Purified anti-human TIGIT (VSTM3) Antibody

Catalog# / Size	372702 / 100 µg
Clone	A15153G
Regulatory Status	RUO
Other Names	T-cell immunoreceptor with Ig and ITIM domains, VSIG9, VSTM3, WUCAM
Isotype	Mouse IgG2a, κ
Description	T cell immunoreceptor with Ig and ITIM domains (TIGIT), also known as VSTM3 or WUCAM, is a 26 kD, type I transmembrane protein and is a member of the PVR (poliovirus receptor) family of immunoglobulin-like domain containing proteins. TIGIT is expressed on activated T cells, follicular T helper, memory, and regulatory T cells as well as on NK cells. TIGIT is a negative regulator of NK and T cell activation. Expression of TIGIT is associated with decreased functionality of CD8 T cells in chronic viral infection and tumors. TIGIT also promotes the differentiation of tolerogenic phenotype in dendritic cells with an increased secretion of IL-10 and a diminished production of IL-12.

Product Details

Verified Reactivity	Human
Antibody Type	Monoclonal
Host Species	Mouse
Immunogen	Recombinant Human TIGIT.
Formulation	Phosphate-buffered solution, pH 7.2, containing 0.09% sodium azide.
Preparation	The antibody was purified by affinity chromatography.
Concentration	0.5 mg/ml
Storage & Handling	The antibody solution should be stored undiluted between 2°C and 8°C.
Application	FC - Quality tested Block - Reported in the literature, not verified in house
Recommended Usage	Each lot of this antibody is quality control tested by immunofluorescent staining with flow cytometric analysis . For flow cytometric staining, the suggested use of this reagent is ≤0.25 µg per million cells in 100 µl volume. It is recommended that the reagent be titrated for optimal performance for each application.
Application Notes	This clone can suppress anti-CD3 induced T cell proliferation <i>in vitro</i> based on in-house testing. This clone has been tested in-house and determined to not be suitable for applications in immunohistochemistry of paraffin-embedded tissue sections (IHC-P). Additional reported applications (for the relevant formats) include: Blocking ¹ .
Application References	1. Stamm H, <i>et al.</i> 2018. <i>Oncogene</i> . Pubmed
(PubMed link indicates BioLegend citation)	
Product Citations	1. Muhammad F, <i>et al.</i> 2020. <i>J Autoimmun.</i> 111:102441. PubMed
RRID	AB_2632714 (BioLegend Cat. No. 372702)

Antigen Details

Structure	26kD; type I transmembrane protein, Ig-like V-type domain, ITIM motif.
Distribution	Activated T cells, Regulatory T cells (Treg), Follicular Helper T cells (TFH), NK cells.
Function	Cell signaling, negative regulation of T cells, T cell tolerance, T cell anergy.
Ligand/Receptor	CD155 (PVR), CD112 (PVRL2, NECTIN-2).
Cell Type	NK cells, T cells, Tfh, Tregs
Biology Area	Cell Adhesion, Cell Biology, Immunology, Inhibitory Molecules, Signal Transduction
Molecular Family	Adhesion Molecules, Immune Checkpoint Receptors
Antigen References	<ol style="list-style-type: none"> 1. Stanietsky N, <i>et al.</i> 2009. <i>Proc. Natl. Acad. Sci.</i> 106:17858. 2. Yu X, <i>et al.</i> 2009. <i>Nat. Immunol.</i> 10:48. 3. Johnston R, <i>et al.</i> 2014. <i>Cancer Cell.</i> 26:923.
Gene ID	201633

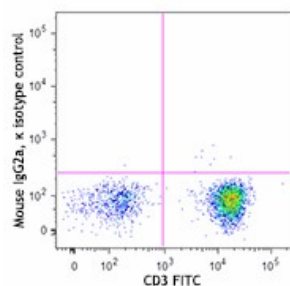
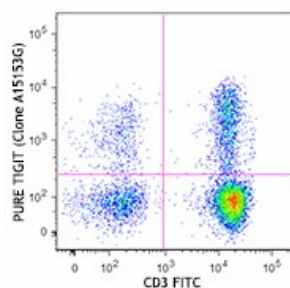
Related Protocols

[Cell Surface Flow Cytometry Staining Protocol](#)

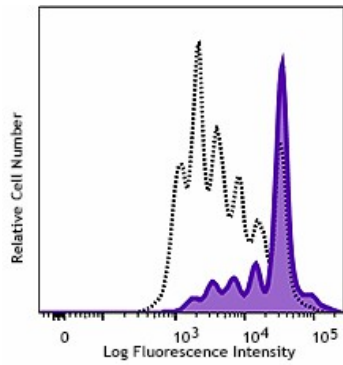
Other Formats

Purified anti-human TIGIT (VSTM3), APC/Fire™ 750 anti-human TIGIT (VSTM3), APC anti-human TIGIT (VSTM3), PE anti-human TIGIT (VSTM3), Brilliant Violet 421™ anti-human TIGIT (VSTM3), Brilliant Violet 605™ anti-human TIGIT (VSTM3), PE/Dazzle™ 594 anti-human TIGIT (VSTM3), PerCP/Cyanine5.5 anti-human TIGIT (VSTM3), PE/Cyanine7 anti-human TIGIT (VSTM3), Ultra-LEAF™ Purified anti-human TIGIT (VSTM3), Biotin anti-human TIGIT (VSTM3), Alexa Fluor® 647 anti-human TIGIT (VSTM3), TotalSeq™-A0089 anti-human TIGIT (VSTM3), TotalSeq™-B0089 anti-human TIGIT (VSTM3), TotalSeq™-C0089 anti-human TIGIT (VSTM3), KIRAVIA Blue 520™ anti-human TIGIT (VSTM3), APC/Cyanine7 anti-human TIGIT (VSTM3), Brilliant Violet 510™ anti-human TIGIT (VSTM3), Brilliant Violet 785™ anti-human TIGIT (VSTM3) Antibody, TotalSeq™-D0089 anti-human TIGIT (VSTM3), Brilliant Violet 711™ anti-human TIGIT (VSTM3), PE/Fire™ 640 anti-human TIGIT (VSTM3), PE/Fire™ 810 anti-human TIGIT (VSTM3)

Product Data



Human peripheral blood leukocytes were stained with CD3 FITC and purified anti-human TIGIT (clone A15153G) (top) or purified mouse IgG2a, κ isotype control (bottom), followed by PE goat anti-mouse IgG. Data shown were gated on lymphocyte population.



Human PBMCs were labeled with CFSE. Cells were cultured in 6-well plate wells that were pre-coated with anti-CD3 plus mouse IgG2a isotype control (open histogram) or with anti-CD3 plus anti-human TIGIT (clone A15153G) (filled histogram). After four days of incubation, cells were harvested and stained for surface CD3. Data shown are SFSE profiles of CD3⁺ cells.

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