

Spark PLUS V475™ anti-human TIGIT (VSTM3) Antibody

Catalog# / Size	373753 / 25 tests
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 and BSA (origin USA)
Preparation	The antibody was purified by affinity chromatography and conjugated with Spark PLUS V475™ under optimal conditions.
Concentration	Lot-specific (to obtain lot-specific concentration and expiration, please enter the lot number in our Certificate of Analysis online tool.)
Storage & Handling	The antibody solution should be stored undiluted between 2°C and 8°C, and protected from prolonged exposure to light. Do not freeze.
Application	FC - Quality tested
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 5 μ L per million cells in 100 μ L staining volume or 5 μ L per 100 μ L of whole blood. It is recommended that the reagent be titrated for optimal performance for each application. * Spark PLUS V475™ has a maximum excitation of 404 nm and a maximum emission of 475 nm.
Excitation Laser	Violet Laser (405 nm)
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)	

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	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

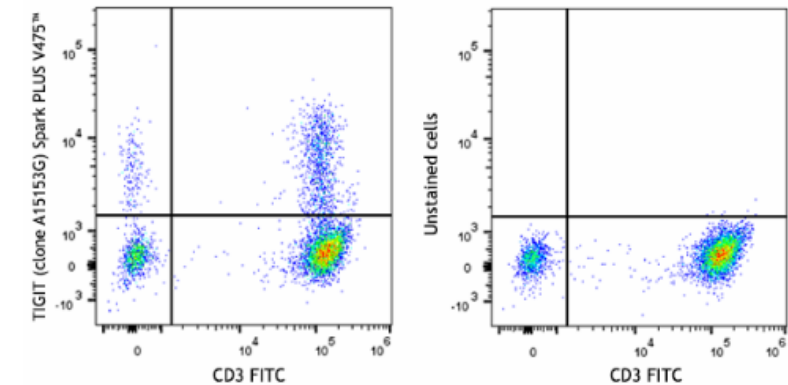
Related Protocols

- [Cell Surface Flow Cytometry Staining Protocol](#)

Other Formats

Brilliant Violet 711™ anti-human TIGIT (VSTM3), PE/Fire™ 640 anti-human TIGIT (VSTM3), PE/Cyanine5 anti-human TIGIT (VSTM3), Brilliant Violet 785™ anti-human TIGIT (VSTM3) Antibody, PerCP/Fire™ 806 anti-human TIGIT (VSTM3), TotalSeq™-D0089 anti-human TIGIT (VSTM3), PerCP/Fire™ 780 anti-human TIGIT (VSTM3), Spark Red™ 718 anti-human TIGIT (VSTM3) (Flexi-Fluor™), Brilliant Violet 421™ anti-human TIGIT (VSTM3), APC/Fire™ 750 anti-human TIGIT (VSTM3), APC anti-human TIGIT (VSTM3), PE anti-human TIGIT (VSTM3), Brilliant Violet 605™ anti-human TIGIT (VSTM3), PE/Dazzle™ 594 anti-human TIGIT (VSTM3), Alexa Fluor® 647 anti-human TIGIT (VSTM3), Purified anti-human TIGIT (VSTM3), Biotin anti-human TIGIT (VSTM3), PE/Fire™ 810 anti-human TIGIT (VSTM3), PE/Fire™ 700 anti-human TIGIT (VSTM3), Brilliant Violet 650™ anti-human TIGIT (VSTM3) Antibody, PE/Fire™ 744 anti-human TIGIT (VSTM3) Antibody, TotalSeq™-C0089 anti-human TIGIT (VSTM3), PerCP/Cyanine5.5 anti-human TIGIT (VSTM3), PE/Cyanine7 anti-human TIGIT (VSTM3), Ultra-LEAF™ Purified anti-human TIGIT (VSTM3), APC/Cyanine7 anti-human TIGIT (VSTM3), TotalSeq™-B0089 anti-human TIGIT (VSTM3), KIRAVIA Blue 520™ anti-human TIGIT (VSTM3), StarBright UltraViolet 740 anti-human TIGIT (VSTM3), Brilliant Violet 750™ anti-human TIGIT (VSTM3), Spark PLUS V475™ anti-human TIGIT (VSTM3), TotalSeq™-A0089 anti-human TIGIT (VSTM3), Brilliant Violet 510™ anti-human TIGIT (VSTM3)

Product Data



Human peripheral blood cells were stained with anti-human CD3 (clone UCHT1) FITC and anti-human TIGIT (VSTM3) (clone A15153G) Spark PLUS V475™ (left) or stained with anti-human CD3 (clone UCHT1) FITC only (right). Data shown are gated on the lymphocyte population.

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