PE/Dazzle™ 594 anti-human TIGIT (VSTM3) Antibody

Catalog# / Size	372715 / 25 tests 372716 / 100 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 PE/Dazzle™ 594 under optimal conditions.
Concentration	Lot-specific (to obtain lot-specific concentration, please enter the lot number in our Concentration and Expiration Lookup or Certificate of Analysis online tools.)
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 µl per million cells in 100 µl staining volume or 5 µl per 100 µl of whole blood. * PE/Dazzle™ 594 has a maximum excitation of 566 nm and a maximum emission of 610 nm.
Excitation Laser	Blue Laser (488 nm) Green Laser (532 nm)/Yellow-Green Laser (561 nm)
Application Notes	This clone can suppress anti-CD3 induced T cell proliferation *in vitro* 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 **(PubMed link indicates BioLegend citation)**	1. Stamm H, *et al*. 2018. *Oncogene*. Pubmed
Product Citations	1. Roberts A, *et al.* 2021. Sci Rep. 11:4030. PubMed

2. Xu L, *et al.* 2021. Front Oncol. 11:686156. PubMed
3. van Montfoort N, *et al.* 2018. Cell. 175:1744. PubMed
4. Den Braanker H, *et al.* 2021. Front Immunol. 12:768113. PubMed
5. Zhang X, *et al.* 2021. Front Immunol. 12:602492. PubMed
6. Collins DR, *et al.* 2021. Immunity. 54:2372. PubMed
7. Bradley D, *et al.* 2022. Nat Commun. 13:5606. PubMed

RRID

AB_2632930 (BioLegend Cat. No. 372715)
AB_2632931 (BioLegend Cat. No. 372716)

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, *et al.* 2009. *Proc. Natl. Acad. Sci.* 106:17858. 2. Yu X, *et al.* 2009. *Nat. Immunol.* 10:48. 3. Johnston R, *et al.* 2014. *Cancer Cell.* 26:923.
Gene ID	201633

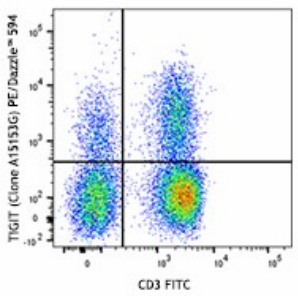
Related Protocols

Cell Surface Flow Cytometry Staining Protocol

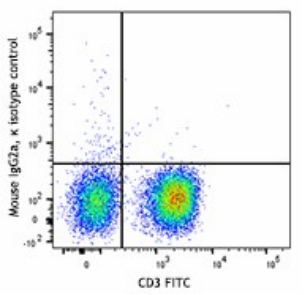
Other Formats

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 TIGIT (clone A15153G) PE/Dazzle™ 594 (top) or mouse IgG2a, κ PE/Dazzle™ 594 isotype control (bottom). Data shown was gated on the lymphocyte population.



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