

## PE anti-human TIGIT (VSTM3) Antibody

<b>Catalog# / Size</b>	372703 / 25 tests 372704 / 100 tests
<b>Clone</b>	A15153G
<b>Regulatory Status</b>	RUO
<b>Other Names</b>	T-cell immunoreceptor with Ig and ITIM domains, VSIG9, VSTM3, WUCAM
<b>Isotype</b>	Mouse IgG2a, κ
<b>Description</b>	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

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<b>Verified Reactivity</b>	Human
<b>Antibody Type</b>	Monoclonal
<b>Host Species</b>	Mouse
<b>Immunogen</b>	Recombinant Human TIGIT.
<b>Formulation</b>	Phosphate-buffered solution, pH 7.2, containing 0.09% sodium azide and BSA (origin USA)
<b>Preparation</b>	The antibody was purified by affinity chromatography and conjugated with PE under optimal conditions.
<b>Concentration</b>	Lot-specific (to obtain lot-specific concentration, please enter the lot number in our <a href="#">Concentration and Expiration Lookup</a> or <a href="#">Certificate of Analysis</a> online tools.)
<b>Storage &amp; Handling</b>	The antibody solution should be stored undiluted between 2°C and 8°C, and protected from prolonged exposure to light. <b>Do not freeze.</b>
<b>Application</b>	<a href="#">FC - Quality tested</a>
<b>Recommended Usage</b>	Each lot of this antibody is quality control tested by <a href="#">immunofluorescent staining with flow cytometric analysis</a> . 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.
<b>Excitation Laser</b>	Blue Laser (488 nm) Green Laser (532 nm)/Yellow-Green Laser (561 nm)
<b>Application Notes</b>	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 <sup>1</sup> .
<b>Application References</b>	1. Stamm H, <i>et al.</i> 2018. <i>Oncogene</i> . <a href="#">Pubmed</a>
<b>(PubMed link indicates BioLegend citation)</b>	
<b>Product Citations</b>	1. Cella M, <i>et al.</i> 2019. <i>Nat Immunol.</i> 1.513888889. <a href="#">PubMed</a> 2. Del Alcazar D, <i>et al.</i> 2019. <i>Cell Rep.</i> 28:3047. <a href="#">PubMed</a> 3. Kaito Y, <i>et al.</i> 2022. <i>Oncol Lett.</i> 23:51. <a href="#">PubMed</a>

4. Wilson TL, *et al.* 2022. *Cancer Discov.* 12:2098. [PubMed](#)
5. Darcis G, *et al.* 2020. *Cell Rep.* 30:2284. [PubMed](#)
6. Katsuyama E, *et al.* 2020. *Cell Reports.* 30(1):112-123.e4.. [PubMed](#)
7. Mathewson ND, *et al.* 2021. *Cell.* 184(5):1281-1298.e26. [PubMed](#)
8. Harris LD, *et al.* 2020. *Front Cell Infect Microbiol.* 10:120. [PubMed](#)

**RRID** AB\_2632729 (BioLegend Cat. No. 372703)  
 AB\_2632730 (BioLegend Cat. No. 372704)

## Antigen Details

<b>Structure</b>	26kD; type I transmembrane protein, Ig-like V-type domain, ITIM motif.
<b>Distribution</b>	Activated T cells, Regulatory T cells (Treg), Follicular Helper T cells (TFH), NK cells.
<b>Function</b>	Cell signaling, negative regulation of T cells, T cell tolerance, T cell anergy.
<b>Ligand/Receptor</b>	CD155 (PVR), CD112 (PVRL2, NECTIN-2).
<b>Cell Type</b>	NK cells, T cells, Tfh, Tregs
<b>Biology Area</b>	Cell Adhesion, Cell Biology, Immunology, Inhibitory Molecules, Signal Transduction
<b>Molecular Family</b>	Adhesion Molecules, Immune Checkpoint Receptors
<b>Antigen References</b>	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.
<b>Gene ID</b>	<a href="#">201633</a>

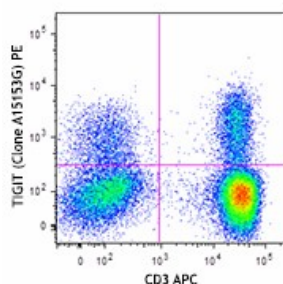
## Related Protocols

[Cell Surface Flow Cytometry Staining Protocol](#)

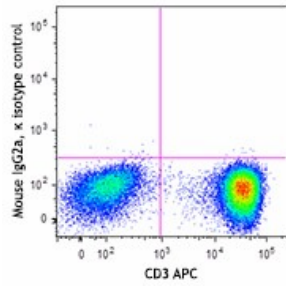
## Other Formats

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 APC and TIGIT (clone A15153G) APC (top) or mouse IgG2a, κ PE isotype control (bottom). Data shown was gated on a lymphocyte population.



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