

## PE anti-mouse TIGIT (Vstm3) Antibody

<b>Catalog# / Size</b>	142103 / 25 µg 142104 / 100 µg
<b>Clone</b>	1G9
<b>Regulatory Status</b>	RUO
<b>Other Names</b>	VSIG9
<b>Isotype</b>	Mouse IgG1, κ
<b>Description</b>	T cell immunoreceptor with Ig and ITIM domains (TIGIT), also known as V-set and transmembrane domain-containing protein 3 (Vstm3), is a 26 kD, type I transmembrane protein and member of the CD28 family. TIGIT is expressed on activated T cells, follicular T helper, memory, and regulatory T cells as well as on NK cells. Its binding partners include CD155 (PVR) and CD112 (PVRL2). TIGIT is a negative regulator of NK and T cell activation. Engagement of TIGIT by dendritic cells results in their differentiation into a tolerogenic phenotype, with an increased secretion of IL-10 and a diminished production of IL-12. Mice deficient for TIGIT are more susceptible to autoimmune disease.

### Product Details

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<b>Verified Reactivity</b>	Mouse
<b>Antibody Type</b>	Monoclonal
<b>Host Species</b>	Mouse
<b>Formulation</b>	Phosphate-buffered solution, pH 7.2, containing 0.09% sodium azide.
<b>Preparation</b>	The antibody was purified by affinity chromatography and conjugated with PE under optimal conditions.
<b>Concentration</b>	0.2 mg/ml
<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 ≤1.0 µg per million cells in 100 µl volume. It is recommended that the reagent be titrated for optimal performance for each application.
<b>Excitation Laser</b>	Blue Laser (488 nm) Green Laser (532 nm)/Yellow-Green Laser (561 nm)
<b>Application References</b>	1. Joller N, <i>et al.</i> 2010. <i>J. Immunol.</i> 186:1338.
<b>(PubMed link indicates BioLegend citation)</b>	
<b>Product Citations</b>	<ol style="list-style-type: none"> <li>Chan S, <i>et al.</i> 2022. <i>Nat Cancer.</i> . <a href="#">PubMed</a></li> <li>Wang L, <i>et al.</i> 2019. <i>Cell Rep.</i> 29:1848. <a href="#">PubMed</a></li> <li>Liu X, <i>et al.</i> 2020. <i>Nature.</i> . <a href="#">PubMed</a></li> <li>Browning LM, <i>et al.</i> 2020. <i>Cell Rep.</i> 33:108219. <a href="#">PubMed</a></li> <li>Yasuda K, <i>et al.</i> 2019. <i>Nat Commun.</i> 10:549. <a href="#">PubMed</a></li> <li>Wu J, <i>et al.</i> 2020. <i>Sci Adv.</i> 6:eaba3458. <a href="#">PubMed</a></li> <li>Kawakami R, <i>et al.</i> 2021. <i>Immunity.</i> 54(5):947-961.e8. <a href="#">PubMed</a></li> <li>Zuo S, <i>et al.</i> 2021. <i>J Immunother Cancer.</i> 9:. <a href="#">PubMed</a></li> <li>Trefzer A, <i>et al.</i> 2021. <i>Cell Reports.</i> 34(6):108748. <a href="#">PubMed</a></li> <li>Henkle TR, <i>et al.</i> 2021. <i>Cancer Res.</i> 81:4560. <a href="#">PubMed</a></li> <li>Zuo S, <i>et al.</i> 2021. <i>EBioMedicine.</i> 64:103240. <a href="#">PubMed</a></li> </ol>

RRID AB\_10895760 (BioLegend Cat. No. 142103)  
AB\_10933258 (BioLegend Cat. No. 142104)

## Antigen Details

<b>Structure</b>	Type I transmembrane protein, 26 kD, member of the CD28 family. Contains 1 Ig-like domain and 1 cytoplasmic ITIM motif.
<b>Distribution</b>	Activated T cells, follicular T helper cells, NK, memory T cells, Tregs.
<b>Function</b>	Negative regulator of T cell activation and proliferation. Induction of tolerogenic dendritic cells.
<b>Ligand/Receptor</b>	CD155 (PVR) and CD112 (PVRL2).
<b>Cell Type</b>	Dendritic cells, NK cells, T cells, Tregs
<b>Biology Area</b>	Immunology, Inhibitory Molecules
<b>Molecular Family</b>	Adhesion Molecules, Immune Checkpoint Receptors
<b>Antigen References</b>	1. Levin SD, <i>et al.</i> 2011. <i>Eur. J. Immunol.</i> 41:902. 2. Yu X, <i>et al.</i> 2009. <i>Nat. Immunol.</i> 10:48. 3. Stanietzky N, <i>et al.</i> 2009. <i>P. Natl. Acad. Sci. USA</i> 106:17858.
<b>Gene ID</b>	<a href="#">100043314</a>

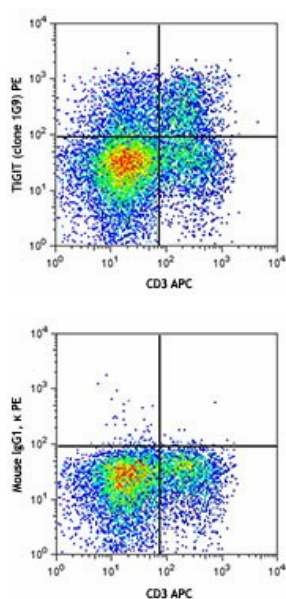
## Related Protocols

[Cell Surface Flow Cytometry Staining Protocol](#)

## Other Formats

Purified anti-mouse TIGIT (Vstm3), PE anti-mouse TIGIT (Vstm3), APC anti-mouse TIGIT (Vstm3), PE/Cyanine7 anti-mouse TIGIT (Vstm3), PE/Dazzle™ 594 anti-mouse TIGIT (Vstm3), Biotin anti-mouse TIGIT (Vstm3), Brilliant Violet 421™ anti-mouse TIGIT (Vstm3), TotalSeq™-A0848 anti-mouse TIGIT (Vstm3), TotalSeq™-B0848 anti-mouse TIGIT (Vstm3), TotalSeq™-C0848 anti-mouse TIGIT (Vstm3)

## Product Data



C57BL/6 mouse splenocytes were activated with anti-CD3 and anti-CD28 antibodies for 24 hours, and then stained with CD3 APC and TIGIT (clone 1G9) PE (top) or mouse IgG1, κ PE isotype control (bottom).

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