

## Ultra-LEAF™ Purified anti-mouse TIGIT (Vstm3) Antibody

<b>Catalog# / Size</b>	156107 / 100 µg 156108 / 1 mg
<b>Clone</b>	4D4/mTIGIT
<b>Regulatory Status</b>	RUO
<b>Other Names</b>	TIGIT, Vstm3, WUCAM, VSIG9
<b>Isotype</b>	Armenian Hamster IgG
<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

---

<b>Verified Reactivity</b>	Mouse
<b>Antibody Type</b>	Monoclonal
<b>Host Species</b>	Armenian Hamster
<b>Immunogen</b>	Mouse TIGIT Tetramers
<b>Formulation</b>	0.2 µm filtered in phosphate-buffered solution, pH 7.2, containing no preservative. Endotoxin level is <0.01 EU/µg of the protein (<0.001 ng/µg of the protein) as determined by the LAL test.
<b>Preparation</b>	The Ultra-LEAF™ (Low Endotoxin, Azide-Free) antibody was purified by affinity chromatography.
<b>Concentration</b>	The antibody is bottled at the concentration indicated on the vial, typically between 2 mg/mL and 3 mg/mL. Older lots may have also been bottled at 1 mg/mL. 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. This Ultra-LEAF™ solution contains no preservative; handle under aseptic conditions.
<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 ≤ 0.5 µg per million cells in 100 µL volume. It is recommended that the reagent be titrated for optimal performance for each application.
<b>Application Notes</b>	It was reported that this clone can block the interaction between mouse TIGIT and CD155.
<b>Application References</b>	1. Joller N, <i>et al.</i> 2011. <i>J. Immunol.</i> 186:1338.
<b>(PubMed link indicates BioLegend citation)</b>	
<b>RRID</b>	AB_2810422 (BioLegend Cat. No. 156107) AB_2810423 (BioLegend Cat. No. 156108)

### 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
<b>Molecular Family</b>	Adhesion Molecules, Immune Checkpoint Receptors
<b>Antigen References</b>	<ol style="list-style-type: none"><li>1. Levin SD, <i>et al.</i> 2011. <i>Eur. J. Immunol.</i> 41:902.</li><li>2. Yu X, <i>et al.</i> 2009. <i>Nat. Immunol.</i> 10:48.</li><li>3. Stanitsky N, <i>et al.</i> 2009. <i>Proc. Natl. Acad. Sci. USA</i> 106:17858</li></ol>
<b>Gene ID</b>	<a href="#">100043314</a>

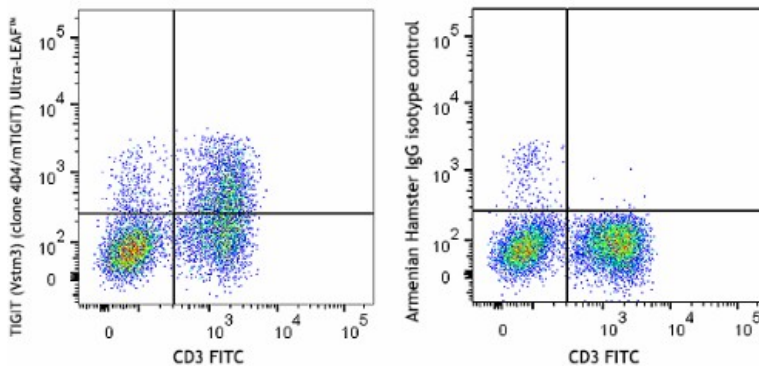
## Related Protocols

[Cell Surface Flow Cytometry Staining Protocol](#)

## Other Formats

Purified anti-mouse TIGIT (Vstm3), PE anti-mouse TIGIT (Vstm3), APC anti-mouse TIGIT (Vstm3), Ultra-LEAF™ Purified anti-mouse TIGIT (Vstm3)

## Product Data



ConA-stimulated (3 days) C57BL/6 mouse splenocytes were stained with CD3 FITC and TIGIT (Vstm3) (clone 4D4/mTIGIT) Ultra-LEAF™ (left) or Armenian Hamster IgG isotype control (right), followed by anti-Armenian hamster IgG PE.

For research use only. Not for diagnostic use. Not for resale. BioLegend will not be held responsible for patent infringement or other violations that may occur with the use of our products.

\*These products may be covered by one or more Limited Use Label Licenses (see the BioLegend Catalog or our website, [www.biolegend.com/ordering#license](http://www.biolegend.com/ordering#license)). BioLegend products may not be transferred to third parties, resold, modified for resale, or used to manufacture commercial products, reverse engineer functionally similar materials, or to provide a service to third parties without written approval of BioLegend. By use of these products you accept the terms and conditions of all applicable Limited Use Label Licenses. Unless otherwise indicated, these products are for research use only and are not intended for human or animal diagnostic, therapeutic or commercial use.

BioLegend Inc., 8999 BioLegend Way, San Diego, CA 92121 [www.biolegend.com](http://www.biolegend.com)  
Toll-Free Phone: 1-877-Bio-Legend (246-5343) Phone: (858) 768-5800 Fax: (877) 455-9587