

PE/Dazzle™ 594 anti-mouse TIGIT (Vstm3) Antibody

Catalog# / Size	142109 / 25 µg 142110 / 100 µg
Clone	1G9
Regulatory Status	RUO
Other Names	VSIG9
Isotype	Mouse IgG1, κ
Description	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

Verified Reactivity	Mouse
Antibody Type	Monoclonal
Host Species	Mouse
Formulation	Phosphate-buffered solution, pH 7.2, containing 0.09% sodium azide.
Preparation	The antibody was purified by affinity chromatography and conjugated with PE/Dazzle™ 594 under optimal conditions.
Concentration	0.2 mg/ml
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 ≤0.5 µg per million cells in 100 µl volume. It is recommended that the reagent be titrated for optimal performance for each application. * 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 References	1. Joller N, <i>et al.</i> 2010. <i>J. Immunol.</i> 186:1338.
(PubMed link indicates BioLegend citation)	
Product Citations	1. Akazawa S, <i>et al.</i> 2021. <i>Diabetologia.</i> 64:878. PubMed 2. Hao C, <i>et al.</i> 2021. <i>Frontiers in Cell and Developmental Biology.</i> 9:695015. PubMed 3. Beltra JC, <i>et al.</i> 2020. <i>Immunity.</i> 52(5):825-841. PubMed 4. Sadik A, <i>et al.</i> 2020. <i>Cell.</i> 1252:182. PubMed 5. Hartmann W, <i>et al.</i> 2020. <i>Cell Reports.</i> 29(8):2243-2256.e4.. PubMed
RRID	AB_2566572 (BioLegend Cat. No. 142109) AB_2566573 (BioLegend Cat. No. 142110)

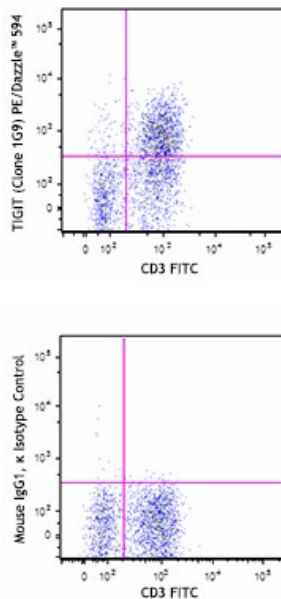
Antigen Details

Structure	Type I transmembrane protein, 26 kD, member of the CD28 family. Contains 1 Ig-like domain and 1 cytoplasmic ITIM motif.
Distribution	Activated T cells, follicular T helper cells, NK, memory T cells, Tregs.
Function	Negative regulator of T cell activation and proliferation. Induction of tolerogenic dendritic cells.
Ligand/Receptor	CD155 (PVR) and CD112 (PVRL2).
Cell Type	Dendritic cells, NK cells, T cells, Tregs
Biology Area	Immunology, Inhibitory Molecules
Molecular Family	Adhesion Molecules, Immune Checkpoint Receptors
Antigen References	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.
Gene ID	100043314

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 stimulated with Con A and IL-2 for three days, and then stained with CD3 FITC (Clone 145-2C11) and TIGIT (Clone 1G9) PE/Dazzle™ 594 (Top) or mouse IgG1, κ PE/Dazzle™ 594 isotype control (Bottom).

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