

Brilliant Violet 650™ anti-human CD366 (Tim-3) Antibody

Catalog# / Size	345027 / 25 tests 345028 / 100 tests
Clone	F38-2E2
Regulatory Status	RUO
Workshop	HCDM listed
Other Names	T cell immunoglobulin and mucin domain containing protein 3, hepatitis virus cellular receptor 2, CD366
Isotype	Mouse IgG1, κ
Description	CD366 (Tim-3) is a transmembrane protein also known as T cell immunoglobulin and mucin domain containing protein-3. Tim-3 is expressed at high levels on activated T cells (preferentially on Th1 cells, monocytes/macrophages, and dendritic cells). Tim-3 has also been shown to exist as a soluble protein. Cells expressing Tim-3 are present at high levels in the CNS of animals at the onset of experimental autoimmune encephalomyelitis (EAE), a disease mediated by lymphocytes secreting Th1-like cytokines. Tim-3 has been proposed to inhibit Th1-mediated immune responses and promote immunological tolerance.

Product Details

Verified Reactivity	Human
Antibody Type	Monoclonal
Host Species	Mouse
Immunogen	Human Tim-3 fusion protein
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 Brilliant Violet 650™ 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.

Brilliant Violet 650™ excites at 405 nm and emits at 645 nm. The bandpass filter 660/20 nm is recommended for detection, although filter optimization may be required depending on other fluorophores used. **Be sure to verify that your cytometer configuration and software setup are appropriate for detecting this channel.** Refer to your instrument manual or manufacturer for support. Brilliant Violet 650™ is a trademark of Sirigen Group Ltd.

[Learn more about Brilliant Violet™.](#)

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Excitation Laser	Violet Laser (405 nm)
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Application Notes	Additional reported applications (for relevant formats of this clone) include: costimulation ¹ (clone 2E2 has been shown to enhance T-cell receptor mediated activation and cytokine secretion) and blocking ^{2,3} .
Application References	<ol style="list-style-type: none"> 1. Hastings WD, <i>et al.</i> 2009. <i>Eur. J. Immunol.</i> 39:2492. (Costim) 2. Jones RB, <i>et al.</i> 2008. <i>J. Exp. Med.</i> 205:2763. (Block) 3. Klibi J, <i>et al.</i> 2009. <i>Blood</i> 113:1957. (FC, Block)
(PubMed link indicates BioLegend citation)	
Product Citations	<ol style="list-style-type: none"> 1. Kourtis N, <i>et al.</i> 2022. <i>Nat Cancer.</i> .: PubMed 2. Wang J, <i>et al.</i> 2020. <i>Cancer Immunol Res.</i> 794:8. PubMed 3. Cheng Y, <i>et al.</i> 2021. <i>Immunity.</i> 54(8):1825-1840.e7. PubMed 4. Sekine T, <i>et al.</i> 2020. <i>Cell.</i> 183:158. PubMed 5. Ma S, <i>et al.</i> 2022. <i>Nat Commun.</i> 13:4118. PubMed
RRID	AB_2565828 (BioLegend Cat. No. 345027) AB_2565829 (BioLegend Cat. No. 345028)

Antigen Details

Structure	Transmembrane protein containing immunoglobulin domain and mucin-like domain; can exist as a soluble form lacking mucin and transmembrane domains
Distribution	Activated T cells, preferentially on Th1 cells, monocytes, dendritic cells
Function	Plays a role in regulating macrophage activation, T cell apoptosis and immune tolerance
Ligand/Receptor	Galectin-9
Cell Type	Dendritic cells, Monocytes, T cells, Th1, Tregs
Biology Area	Immunology, Inhibitory Molecules
Molecular Family	CD Molecules, Immune Checkpoint Receptors
Antigen References	<ol style="list-style-type: none"> 1. Hafler DA and Kuchroo V. 2008. <i>J. Exp. Med.</i> 205:2699. 2. Zhu C, <i>et al.</i> 2005. <i>Nat. Immunol.</i> 6:1245. 3. Wang F, <i>et al.</i> 2009. <i>Immunobiology</i> 214:342.
Gene ID	84868

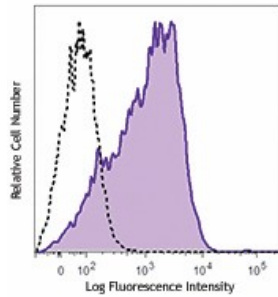
Related Protocols

[Cell Surface Flow Cytometry Staining Protocol](#)

Other Formats

Purified anti-human CD366 (Tim-3), PE anti-human CD366 (Tim-3), Brilliant Violet 421™ anti-human CD366 (Tim-3), Ultra-LEAF™ Purified anti-human CD366 (Tim-3), APC anti-human CD366 (Tim-3), PE/Cyanine7 anti-human CD366 (Tim-3), PerCP/Cyanine5.5 anti-human CD366 (Tim-3), Brilliant Violet 605™ anti-human CD366 (Tim-3), FITC anti-human CD366 (Tim-3), Purified anti-human CD366 (Tim-3) (Maxpar® Ready), Brilliant Violet 711™ anti-human CD366 (Tim-3), APC/Cyanine7 anti-human CD366 (Tim-3), Brilliant Violet 785™ anti-human CD366 (Tim-3), Brilliant Violet 650™ anti-human CD366 (Tim-3), Brilliant Violet 510™ anti-human CD366 (Tim-3), PE/Dazzle™ 594 anti-human CD366 (Tim-3), GolnVivo™ Purified anti-human CD366 (Tim-3), APC/Fire™ 750 anti-human CD366 (Tim-3), Pacific Blue™ anti-human CD366 (Tim-3), Biotin anti-human CD366 (Tim-3), TotalSeq™-A0169 anti-human CD366 (Tim-3), TotalSeq™-C0169 anti-human CD366 (Tim-3), PE/Cyanine5 anti-human CD366 (Tim-3), TotalSeq™-B0169 anti-human CD366 (Tim-3), Brilliant Violet 750™ anti-human CD366 (Tim-3) Antibody, TotalSeq™-D0169 anti-human CD366 (Tim-3), PE/Fire™ 810 anti-human CD366 (Tim-3), PE/Fire™ 640 anti-human CD366 (Tim-3)

Product Data



PHA-stimulated (three days) human peripheral blood lymphocytes were stained with anti-human CD366 (clone F38-2E2) Brilliant Violet 650™ (filled histogram) or mouse IgG1, κ Brilliant Violet 650™ isotype control (open histogram).

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