

## PE/Cyanine7 anti-human CD366 (Tim-3) Antibody

<b>Catalog# / Size</b>	345013 / 25 tests 345014 / 100 tests
<b>Clone</b>	F38-2E2
<b>Regulatory Status</b>	RUO
<b>Workshop</b>	HCDM listed
<b>Other Names</b>	T cell immunoglobulin and mucin domain containing protein 3, hepatitis virus cellular receptor 2, CD366
<b>Isotype</b>	Mouse IgG1, κ
<b>Description</b>	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

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<b>Verified Reactivity</b>	Human
<b>Antibody Type</b>	Monoclonal
<b>Host Species</b>	Mouse
<b>Immunogen</b>	Human Tim-3 fusion protein
<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/Cyanine7 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>	Additional reported applications (for relevant formats of this clone) include: costimulation <sup>1</sup> (clone 2E2 has been shown to enhance T-cell receptor mediated activation and cytokine secretion) and blocking <sup>2,3</sup> .
<b>Additional Product Notes</b>	BioLegend is in the process of converting the name PE/Cy7 to PE/Cyanine7. The dye molecule remains the same, so you should expect the same quality and performance from our PE/Cyanine7 products. Please contact <a href="#">Technical Service</a> if you have any questions.
<b>Application References</b>	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)
<b>(PubMed link indicates BioLegend citation)</b>	
<b>Product Citations</b>	

1. Zhao Y, *et al.* 2021. *Front Immunol.* 12:665442. [PubMed](#)
2. Zhou R, *et al.* 2020. *Immunity.* S1074-7613(20)30333-2.. [PubMed](#)
3. Gao Y, *et al.* 2021. *Oncogenesis.* 10:62. [PubMed](#)
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5. Zhan Y, *et al.* 2021. *JCI Insight.* 6:. [PubMed](#)
6. Jespersen H, *et al.* 2017. *Nat Commun.* 10.1038/s41467-017-00786-z. [PubMed](#)
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8. Hebbar N, *et al.* 2022. *Nat Commun.* 13:587. [PubMed](#)
9. Jin S, *et al.* 2020. *Cell Res.* 30:950. [PubMed](#)
10. Wang J, *et al.* 2019. *Oncol Lett.* 4.948611111. [PubMed](#)
11. Harper J, *et al.* 2021. *Nat Commun.* 12:2866. [PubMed](#)
12. Sade-Feldman M, *et al.* 2018. *Cell.* 175:998. [PubMed](#)
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**RRID** AB\_2561719 (BioLegend Cat. No. 345013)  
 AB\_2561720 (BioLegend Cat. No. 345014)

## Antigen Details

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

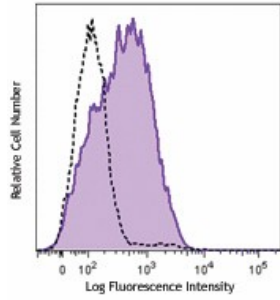
## Related Protocols

[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



Th1-polarized cells from human peripheral blood mononuclear cells were stained with anti-human CD366 (Tim-3, clone F38-2E2) PE/Cyanine7 (filled histogram) or mouse IgG1,  $\kappa$  PE/Cyanine7 isotype control (open histogram).

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