



# Brilliant Violet 785™ anti-human CD366 (Tim-3) Antibody

Catalog# / Size 345031 / 25 tests

345032 / 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 785™

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 785™ excites at 405 nm and emits at 785 nm. The bandpass filter 780/60 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 785™ is a trademark of Sirigen Group Ltd.

Learn more about Brilliant Violet™.

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equivalent

Excitation Laser Violet Laser (405 nm)

#### Application Notes

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>.

### Application References

## (PubMed link indicates BioLegend citation)

1. Hastings WD, et al. 2009. Eur. J. Immunol. 39:2492. (Costim)

2. Jones RB, et al. 2008. J. Exp. Med. 205:2763. (Block)

3. Klibi J, et al 2009. Blood 113:1957. (FC, Block)

#### **Product Citations**

1. Bezverbnaya K, et al. 2021. Cytotherapy. 23:820. PubMed

2. Rha MS, et al. 2021. Immunity. 54:44. PubMed

3. Gibellini L, et al. 2020. EMBO Mol Med. 12:e13001. PubMed 4. Eyquem J, et al. 2017. Nature. 543:113-117. PubMed

5. Chow MT et al. 2019. Immunity. 50(6):1498-1512 . PubMed

6. Amor C, et al. 2020. Nature. 583:127. PubMed

Carnevale J, et al. 2022. Nature. 609:174. PubMed 8. Vitanza NA, et al. 2021. Nature Medicine. :. PubMed

9. Kacherovsky N, et al. 2019. Nat Biomed Eng. 0.66875. PubMed

10. Schoutrop E, et al. 2022. Oncoimmunology. 11:2093426. PubMed

11. Leclercq G, et al. 2022. J Immunother Cancer. 10:. PubMed

12. Khuzwayo S, et al. 2021. Front Immunol. 12:631410. PubMed

Kim Y, et al. 2021. Oncol Lett. 1.0222222222. PubMed
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15. Karlsson J, et al. 2020. Nat Commun. 1.773611111. PubMed

16. Choe JH, et al. 2021. Sci Transl Med. 13:. PubMed

**RRID** 

AB 2565832 (BioLegend Cat. No. 345031) AB 2565833 (BioLegend Cat. No. 345032)

# **Antigen Details**

Structure Transmembrane protein containing immunoglobulin domain and mucin-like domain; can exist as a

soluble form lacking mucin and transmembrane domains

Activated T cells, preferentially on Th1 cells, monocytes, dendritic cells Distribution

Plays a role in regulating macrophage activation, T cell apoptosis and immune tolerance Function

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

1. Hafler DA and Kuchroo V. 2008. J. Exp. Med. 205:2699. Antigen References

2. Zhu C, et al. 2005. Nat. Immunol. 6:1245. 3. Wang F, et al. 2009. Immunobiology 214:342.

Gene ID 84868

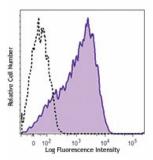
### **Related Protocols**

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 antihuman CD366 (Tim-3), Brilliant Violet 750™ anti-human CD366 (Tim-3) Antibody, TotalSeq™-D0169 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 785™ (filled histogram) or mouse IgG1, κ Brilliant Violet 785™ (open histogram).

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