Maxpar Anti-Human CD366/Tim-3 (F38-2E2)-169Tm

Catalog Number, Package Size: 3169028B, 100 tests
3169028C, 25 tests

Clone: F38-2E2
Other Names: T cell immunoglobulin and mucin domain-containing protein 3, hepatatis virus cellular receptor 2 (HAVCR2)
Isotype: Mouse IgG1, kappa

Reactivity: Human
Tag: 169Tm
Formulation: Antibody stabilizer with 0.05% sodium azide
Storage: Store at 2–8 °C. Do not freeze.
Application: Suspension mass cytometry

Technical Information

Description: T cell immunoglobulin and mucin domain-containing molecule 3 (Tim-3) is a type I transmembrane receptor that is constitutively expressed at high levels on NK cells, and also expressed on specific subsets of CD4+ and CD8+ T cells, on subpopulations of macrophages and DCs, and on monocytes, although to a lesser extent than on NK cells. Tim-3 was originally identified as a marker of terminally differentiated CD4+ Th1 cells, and subsequently associated with T cell exhaustion and impaired virus-specific T cell responses in HIV-1, hepatitis C virus (HCV), and hepatitis B virus (HBV) infection. To date, three ligands have been described for Tim-3, including galactin-9 (Gal-9), cell-surface phosphatidylethine, and the high-mobility group box 1 (HMGB1) protein. Gal-9 is highly expressed in immune tissues, and engagement of Tim-3 by Gal-9 triggers apoptosis in CD4+ Th1 cells, T cells, and thymocytes. Tim-3 signaling on immune cells can trigger either inhibitory or activating signals.

Application: The metal-tagged antibody is designed and formulated for the application of suspension mass cytometry using the Fluidigm CyTOF® suspension systems on healthy human PBMC.

Validation: Each lot of Maxpar® antibody is quality control-tested by suspension mass cytometry analysis of stained cells using appropriate positive and negative cell staining and/or activation controls.

Recommended use: Use 1 µL for up to 3 x 10^6 live cells in 100 µL staining volume. We recommend titrating the antibody for optimal performance for each of the desired applications. Centrifuge the stock antibody at 12,000 x g for 5 min to sediment antibody aggregates. Fixation is typically used in intracellular staining protocols or in barcoding with the Cell-ID™ 20-Plex Pd Barcoding Kit. However, fixing before antibody staining can affect epitope structure and antibody binding, with the impact varying on the type and concentration of fixative and the protocol used. It is therefore important to perform a small, preliminary antibody staining experiment, with and without fixation, using non-critical samples.

Applicable Protocols

Before using this product, refer to the instructions in the Maxpar Cell Surface Staining with Fresh Fix Protocol (400276).

References


Safety

Use standard laboratory safety protocols. Read and understand the safety data sheets (SDSs) before handling chemicals. To obtain SDSs, go to fluidigm.com and search for 3000000X.

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