Technical Data Sheet

PE Mouse Anti-Mouse CD366 (TIM-3)

Product Information

Material Number: 566346
Alternate Name: Cd366; T-cell membrane protein; Tim3; TIMD-3; Timd3; HAVcr-2; Haver2;
Size: 0.1 mg
Concentration: 0.2 mg/ml
Clone: 5D12/TIM-3 (also known as 5D12)
Immunogen: Mouse TIM-3 Recombinant Protein
Isotype: Mouse IgG1, κ
Reactivity: QC Testing: Mouse
Storage Buffer: Aqueous buffered solution containing ≤0.09% sodium azide.

Description

The 5D12 monoclonal antibody specifically recognizes CD366 which is also known as TIM-3 (T-cell immunoglobulin and mucin domain-containing 3) or T-cell membrane protein 3. TIM-3 is encoded by Havcr2 (hepatitis A virus cellular receptor 2). TIM-3 is a type I transmembrane glycoprotein that belongs to the human TIM family within the immunoglobulin superfamily, having one Ig-like V-type domain in its extracellular region. TIM-3 is expressed on activated monocytes, macrophages, dendritic cells, microglia, and mast cells. It is also expressed on type-1 CD4+ (Th1-like) T cells, CD8+ T cytotoxic cells, regulatory T cells (Treg), and natural killer (NK) cells. TIM-3 functions as an inhibitory receptor which helps cells maintain immunological homeostasis and self tolerance. Crosslinking of cell surface TIM-3 by Galectin-9 binding downregulates Th1-like and CD8+ T cell responses and can promote Treg or myeloid-derived suppressor cells. TIM-3 enables dendritic cells to bind phosphatidyl serine expressed by apoptotic cells and to phagocytize these cells to quell potential inflammation. TIM-3 also binds to the alarmin HMGB1 thereby preventing Toll-like receptor (TLR) by released tumor cell DNA.

Preparation and Storage

Store undiluted at 4°C and protected from prolonged exposure to light. Do not freeze.

The monoclonal antibody was purified from tissue culture supernatant or ascites by affinity chromatography. The antibody was conjugated with R-PE under optimum conditions, and unconjugated antibody and free PE were removed.
Application Notes

Suggested Companion Products

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<th>Catalog Number</th>
<th>Name</th>
<th>Size</th>
<th>Clone</th>
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<td>Stain Buffer (FBS)</td>
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<td>PE Mouse IgG1, x Isotype Control</td>
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<td>Purified Rat Anti-Mouse CD16/CD32 (Mouse BD Fc Block™)</td>
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<td>349202</td>
<td>BD FACSTM Lysing Solution</td>
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Product Notices

1. Since applications vary, each investigator should titrate the reagent to obtain optimal results.
2. An isotype control should be used at the same concentration as the antibody of interest.
3. Caution: Sodium azide yields highly toxic hydrazoic acid under acidic conditions. Dilute azide compounds in running water before discarding to avoid accumulation of potentially explosive deposits in plumbing.
4. For fluorochrome spectra and suitable instrument settings, please refer to our Multicolor Flow Cytometry web page at www.bdbiosciences.com/colors.
5. Alexa Fluor® is a registered trademark of Life Technologies Corporation.

References


