

PE Anti-Mouse TIGIT (1G9) Antibody

Catalog # ATB10200

Specification

PE Anti-Mouse TIGIT (1G9) Antibody - Product Information

Application Isotype Concentration Reactivity Formulation FC Mouse IgG1, kappa 0.2 mg/mL Mouse 10 mM NaH2PO4, 150 mM NaCl, 0.09% NaN3, 0.1% gelatin, pH7.2 Mouse

PE Anti-Mouse TIGIT (1G9) Antibody - Additional Information

Gene ID Alternative Name(s) VSTM3

Format PE

Host

Preparation

This monoclonal antibody was purified from tissue culture supernatant via affinity chromatography. The purified antibody was conjugated under optimal conditions, with unreacted dye removed from the preparation. It is recommended to store the product undiluted at 4°C, and protected from prolonged exposure to light. Do not freeze.

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Application Notes

This antibody preparation has been quality-tested for flow cytometry using mouse spleen cells, or an appropriate cell type (where indicated). The amount of antibody required for optimal staining of a cell sample should be determined empirically in your system.

Storage Conditions 2-8°C protected from light

PE Anti-Mouse TIGIT (1G9) Antibody - Protocols

Provided below are standard protocols that you may find useful for product applications.

- <u>Western Blot</u>
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- <u>Cell Culture</u>



PE Anti-Mouse TIGIT (1G9) Antibody - Images



C57BI/6 splenocytes were stained with FITC Anti-Mouse CD4 (35-0041), APC Anti-Human/Mouse Foxp3 (20-5773) and 0.25 ug PE Anti-Mouse TIGIT (ATB10200) (right panel) or 0.25 ug PE Mouse IgG1 (left panel).



C57BI/6 splenocytes were stained with FITC Anti-Mouse CD4, APC Anti-Human/Mouse Foxp3, and 0.25 ug PE Anti-Mouse TIGIT (1G9) manufactured by Tonbo Biosciences (left panel) or BioLegend (right panel). Cells in the CD4+ gate are shown.

PE Anti-Mouse TIGIT (1G9) Antibody - Background

The 1G9 antibody reacts with mouse TIGIT (T cell Ig and ITIM domain), a 26 kDa member of the CD28 receptor family which is reported to regulate T cell receptor (TCR) activation. Within the CD28 family of receptors there are those which have co-stimulatory activity, such as CD28 and CTLA-4, as well as more recently identified receptors like TIGIT which are proposed to provide co-inhibitory signals. TIGIT is expressed and upregulated on activated T cells, and is also expressed on memory and regulatory T cells. Upon engagement by its ligands, CD112 and CD155, TIGIT signaling inhibits T cell proliferation and suppresses T cell responses, without triggering cell deletion. A second inhibitory effect of TIGIT signaling is the generation of immunoregulatory dendritic cells, which secrete IL-10 and TGF-beta to further inhibit T cell function. The 1G9 antibody may be used for flow cytometric analysis of TIGIT, which is expressed at very high levels on T regulatory cells (Tregs) and activated conventional T cells, as well as memory T cells and NK cells.