TECHNICAL DATA SHEET

PE Anti-Mouse TIGIT (1G9)

Catalog Number: 50-1421

PRODUCT INFORMATION

Contents: PE Anti-Mouse TIGIT (1G9)

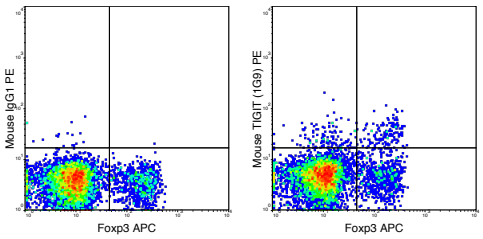
Isotype: Mouse IgG1, kappa

Concentration: 0.2 mg/mL

Clone: 1G9

Reactivity: Mouse

Formulation: 10 mM NaH2PO4, 150 mM NaCl, 0.09% NaN3, 0.1% gelatin, pH7.2



C57Bl/6 splenocytes were stained with FITC Anti-Mouse CD4 (35-0041), APC Anti-Mouse Foxp3 (20-5773) and 0.25 ug PE Anti-Mouse TIGIT (50-1421) (right panel) or 0.25 ug PE Mouse IgG1 (left panel).

DESCRIPTION

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.

PREPARATION & STORAGE

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.

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.

REFERENCES

Joller N, Peters A, Anderson AC, and Kuchroo VK. 2012. Immunol. Rev. 248(1):122-139. (flow cytometry)Joller N, Hafler JP, Brynedal B, Kassam N, Spoerl S, Levin SD, Sharpe AH, and Kuchroo VK. 2011. J. Immunol. 186: 1338-1342. (flow cytometry)