

TECHNICAL DATA SHEET

In Vivo Ready™ Anti-Mouse TIGIT (1G9)

Catalog Number: 40-1421

PRODUCT INFORMATION

Contents: In Vivo Ready™ Anti-Mouse TIGIT (1G9)

Isotype: Mouse IgG1, kappa

Concentration: 2.0 mg/mL

Clone: 1G9

Reactivity: Mouse

Use By: 12 months from date of receipt

Storage Conditions: 2-8°C

Endotoxin Level: Less than or equal to 0.01 EU/ug, as determined by the LaL assay

Formulation: 10 mM NaH₂PO₄, 150 mM NaCl, pH7.2

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 preparation was purified from tissue culture supernatant via affinity chromatography. For In Vivo Ready™ (IVR) products, each preparation is also evaluated for endotoxin levels using the LAL assay. It is recommended to store the product undiluted at 4°C. Do not freeze.

APPLICATION NOTES

Tonbo Biosciences tests all of our antibodies by flow cytometry. Citations may be provided as a resource for additional applications that have not been validated by Tonbo Biosciences - please consult Materials and Methods sections for additional details about the use of any product in these publications.

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)

Tonbo Biosciences tests all antibodies by flow cytometry. Citations are provided as a resource for additional applications that have not been validated by Tonbo Biosciences. Please choose the appropriate format for each application and consult Materials and Methods sections for additional details about the use of any product in these publications.

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