

TECHNICAL DATA SHEET

violetFluor™ 450 Anti-Human CD161 (HP-3G10)

Catalog Number: 75-1619

PRODUCT INFORMATION

Contents: violetFluor™ 450 Anti-Human CD161 (HP-3G10)

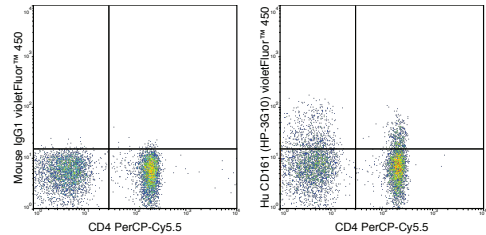
Isotype: Mouse IgG1, kappa

Concentration: 5 uL (0.5 ug)/test

Clone: HP-3G10

Reactivity: Human

Formulation: 10 mM NaH₂PO₄, 150 mM NaCl, 0.09% Na₃N, 0.1% gelatin, pH7.2



Human peripheral blood lymphocytes were stained with PerCP-Cy5.5 Anti-Human CD4 (65-0048) and 5 uL (0.5 ug) violetFluor™ 450 Anti-Human CD161 (75-1619) (right panel) or 0.5 ug violet-Fluor™ 450 Mouse IgG1 isotype control (left panel).

DESCRIPTION

The HP-3G10 antibody is specific for human CD161, also known as NKR-P1A, a type II transmembrane lectin-like receptor and member of the killer cell lectin-like receptor (KLR) family. CD161 exists as a homodimer which is prominently expressed on natural killer (NK) and NKT cells, where it is proposed to regulate the function of both cell types. CD161 is also found on T cell subsets, including T regulatory cells (Tregs), memory/effector CD4+ T cells, and CD8+ T cells. Th17 cells have been demonstrated to co-express CD161, as surface IL-17A+ cells are contained within the CD161+ fraction of CD4 T cells, so that CD161 (in combination with CCR6) is often used as a marker for enrichment of Th17 cells. The HP-3G10 antibody may be used for flow cytometric analysis of CD161 on NK and NKT cells, as well as on various T cell subsets. The antibody is also reported to be cross-reactive with Baboon, Chimpanzee and Rhesus CD161.

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 pre-titrated and quality-tested for flow cytometry using an appropriate cell type. The antibody has been diluted for use at 5 uL per test, defined as the amount of antibody that will stain a cell sample in a final volume of approximately 100 uL. The number of cells within a sample should be determined empirically, but typically ranges between 1x10⁵ to 1x10⁸ cells.

violetFluor™ 450 dye is excited by the violet (405 nm) laser and has a peak emission of 450 nm. The most common band pass filters for this dye are 440/40 or 450/50. violetFluor™ 450 can be used as an alternative for Pacific Blue®, BD Horizon™ V450 or eFluor® 450.

REFERENCES

Yamada H, Nakashima Y, Okazaki K, Mawatari T, Fukushi J-I, Oyamada A, Fujimura K, Iwamoto Y, and Yoshikai Y. 2011. J. Rheumatol. 38: 1569-1575. (Flow cytometry)Fogal B, Yi T, Wang C, Rao DA, Lebastchi A, Kulkarni S, Tellides G, and Pober JS. 2011. J. Immunol. 187: 6268-6280. (in vitro depletion)Pozo, D, Vales-Gomez, Mavaddat N, Williamson SC, Chisholm SE, and Reyburn H. 2006. J. Immunol. 176: 2397-2406. (Western blot)Exley M, Porcelli S, Furman M, Garcia J, and Balk S. 1998. J. Exp. Med. 188: 867-876. (in vitro blocking, Western blot)

NOTE: Please choose the appropriate format for each application. Citations are provided as a convenience to you; please consult Materials and Methods sections for additional details about the use of any product in these publications.

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