

TECHNICAL DATA SHEET

# FITC Anti-Human CD161 (HP-3G10)

Catalog Number: 35-1619

## PRODUCT INFORMATION

**Contents:** FITC Anti-Human CD161 (HP-3G10)

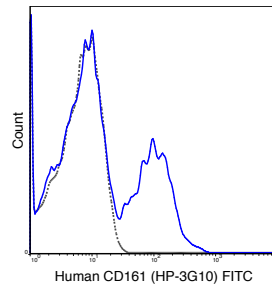
**Isotype:** Mouse IgG1, kappa

**Concentration:** 5 uL (0.5 ug)/test

**Clone:** HP-3G10

**Reactivity:** Human

**Formulation:** 10 mM NaH<sub>2</sub>PO<sub>4</sub>, 150 mM NaCl, 0.09% NaN<sub>3</sub>, 0.1% gelatin, pH7.2



Human peripheral blood lymphocytes were stained with 5 uL (0.5 ug) FITC Anti-Human CD161 (35-1619) (solid line) or 0.5 ug FITC Mouse IgG1 isotype control (dashed line).

## 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<sup>+</sup> T cells, and CD8<sup>+</sup> T cells. Th17 cells have been demonstrated to co-express CD161, as surface IL-17A<sup>+</sup> cells are contained within the CD161<sup>+</sup> 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 1x10<sup>5</sup> to 1x10<sup>8</sup> cells.

## 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).