

**Brilliant Violet 421™ anti-human CD161**

**Catalog # / Size:** 2299565 / 25 tests  
2299570 / 100 tests

**Clone:** HP-3G10

**Isotype:** Mouse IgG1, κ

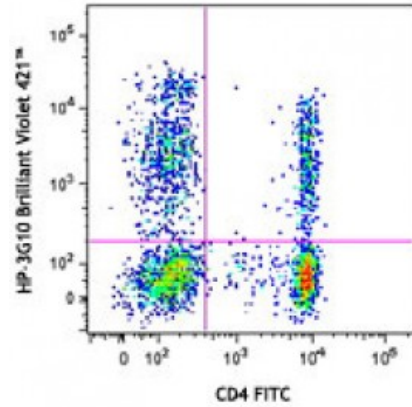
**Immunogen:** Human NK cells

**Reactivity:** Human

**Preparation:** The antibody was purified by affinity chromatography and conjugated with Brilliant Violet 421™ under optimal conditions. The solution is free of unconjugated Brilliant Violet 421™ and unconjugated antibody.

**Formulation:** Phosphate-buffered solution, pH 7.2, containing 0.09% sodium azide and BSA (origin USA).

**Concentration:** Lot-specific

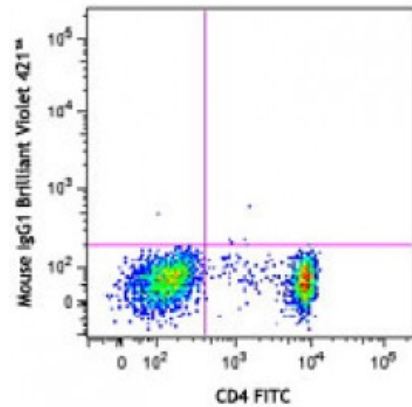


Human peripheral blood lymphocytes stained with CD4 FITC and CD161 (clone HP-3G10) Brilliant Violet 421™ (top) or mouse IgG1 κ Brilliant Violet 421™ isotype control (bottom).

**Applications:**

**Applications:** Flow Cytometry

**Recommended Usage:** Each lot of this antibody is quality control tested by immunofluorescent staining with flow cytometric analysis. For flow cytometric staining, the suggested use of this reagent is ≤5 microL per million cells or 5 microL per 100 microL of whole blood. It is recommended that the reagent be titrated for optimal performance for each application.



Brilliant Violet 421™ excites at 405 nm and emits at 421 nm. The standard bandpass filter 450/50 nm is recommended for detection. Brilliant Violet 421™ is a trademark of Sirigen Group Ltd.

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**Application Notes:** Additional reported applications (for the relevant formats) include: inhibition of cytokine production and Western blotting under nonreducing conditions.

**Application References:**

1. Gumá M, et al. 2004. *Blood* 104:3664.
2. Exley M, et al. 1998. *J. Exp. Med.* 188:867.
3. Marquez C, et al. 1998. *Blood* 91:2760.

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**Description:** CD161 is a type II transmembrane glycoprotein, also known as NKR-P1A, that is expressed as a 40-44 kD homodimer. It is a member of the C-type lectin superfamily. CD161 is expressed on a majority of NK cells, NKT cells, and subsets of peripheral T cells and CD3<sup>+</sup> thymocytes. It has been reported that Th17 cells are a subpopulation of CD4<sup>+</sup>CD161<sup>+</sup>CCR6<sup>+</sup> cells. While the biological function of CD161 is not clear, it has been suggested to serve either as a stimulatory receptor or to inhibit NK cell-mediated cytotoxicity and cytokine production. LLT-1 (lectin-like transcript-1, also named as osteoclast inhibitory lectin or CLEC2D) is the ligand of CD161.

**Antigen References:**

1. Takahashi T, et al. 2006. *J. Immunol.* 176:211.
2. Cosmi L, et al. 2008. *J. Exp. Med.* 205:1903.
3. Aldemir H, et al. 2005. *J. Immunol.* 175:7791.
4. Rosen DB, et al. 2008. <