

**Brilliant Violet 605™ anti-human CD161**

**Catalog # / Size:** 2299580 / 100 tests  
2299575 / 25 tests

**Clone:** HP-3G10

**Isotype:** Mouse IgG1, κ

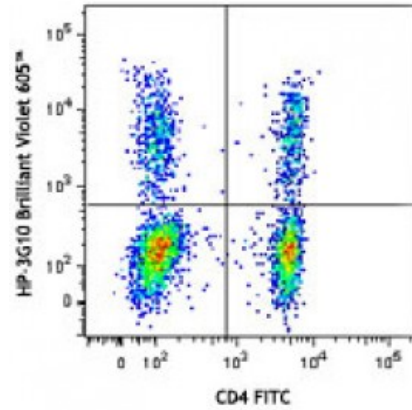
**Immunogen:** Human NK cells

**Reactivity:** Human

**Preparation:** The antibody was purified by affinity chromatography and conjugated with Brilliant Violet 605™ under optimal conditions. The solution is free of unconjugated Brilliant Violet 605™ 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 were stained with CD4 FITC and CD161 (clone HP-3G10) Brilliant Violet 605™.

**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 605™ excites at 405 nm and emits at 603 nm. The bandpass filter 610/20 nm is recommended for detection, although filter optimization may be required depending on other fluorophores used. **Be sure to verify that your cytometer configuration and software setup are appropriate for detecting this channel.** Refer to your instrument manual or manufacturer for support. Brilliant Violet 605™ 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.

**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. <