

**Brilliant Violet 510™ anti-human CD161**

**Catalog # / Size:** 2299605 / 25 tests  
2299610 / 100 tests

**Clone:** HP-3G10

**Isotype:** Mouse IgG1, κ

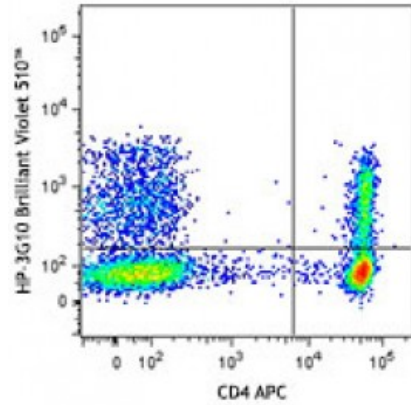
**Immunogen:** Human NK cells

**Reactivity:** Human

**Preparation:** The antibody was purified by affinity chromatography and conjugated with Brilliant Violet 510™ under optimal conditions. The solution is free of unconjugated Brilliant Violet 510™ and unconjugated antibody.

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

**Concentration:** Lot-specific

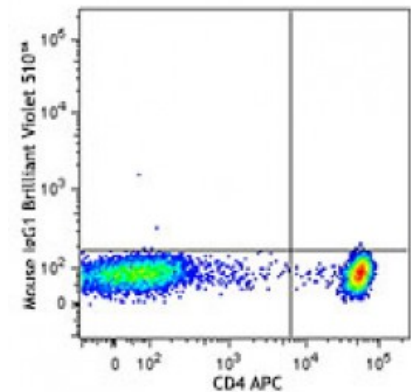


Human peripheral blood lymphocytes were stained with CD4 APC and CD161 (clone HP-3G10) Brilliant Violet 510™ (top) or mouse IgG1, κ Brilliant Violet 510™ isotype control (bottom).

**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 510™ excites at 405 nm and emits at 510 nm. The bandpass filter 510/50 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 510™ is a trademark of Sirigen Group Ltd.

This product is subject to proprietary rights of Sirigen Inc. and is made and sold under license from Sirigen Inc. The purchase of this product conveys to the buyer a non-transferable right to use the purchased product for research

purposes only. This product may not be resold or incorporated in any manner into another product for resale. Any use for therapeutics or diagnostics is strictly prohibited. This product is covered by U.S. Patent(s), pending patent applications and foreign equivalents.

**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. <