SONY

Product Data Sheet

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

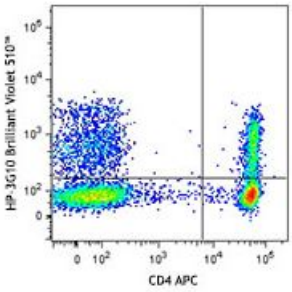
Reactivity: Human, Non-human primate, Other

Preparation: The antibody was purified by affinity chromatography and conjugated with Brilliant Violet 510™ under optimal conditions.

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

Workshop Number: V C050

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).

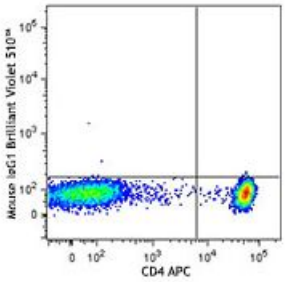
Applications:

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 µl per million cells or 5 µl per 100 µl 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.

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



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Application References:

1. Gumß 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 $CD3^+$ thymocytes. It has been reported that Th17 cells are a subpopulation of $CD4^+CD161^+CCR6^+$ 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. *J. Immunol.* 180:6508.

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