

Brilliant Violet 421™ anti-human CD13

Catalog # / Size: 2108580 / 100 tests
2108575 / 25 tests

Clone: WM15

Isotype: Mouse IgG1, κ

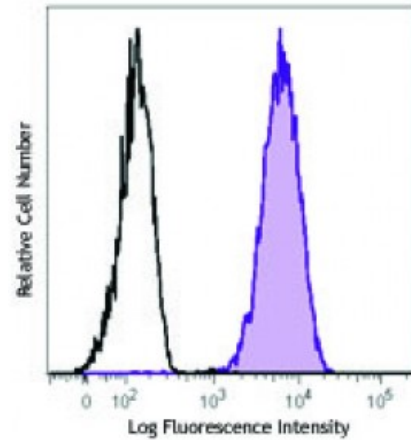
Reactivity: Human

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).

Workshop Number: IV M44

Concentration: Lot-specific



Human peripheral blood granulocytes were stained with CD13 (clone WM15) Brilliant Violet 421™ (filled histogram) or mouse IgG1, κ Brilliant Violet 421™ isotype control (open histogram).

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 tumor-cell invasion and blocking of aminopeptidase activities^{2,3}, and immunohistochemical staining of acetone-fixed frozen tissue sections⁵. WM15 does not recognize formalin-fixed or paraffin-embedded tissue sections⁵. The LEAF™ purified antibody (Endotoxin <0.1 EU/μg, Azide-Free, 0.2 μm filtered) is recommended for functional assays (Cat. No. 301708).

Application References:

1. Knapp W, *et al.* 1989. Leucocyte Typing IV. Oxford University Press. New York.
2. Saiki I, *et al.* 1993. *Int J Cancer*. 54:137. (Block)
3. Rosenzweig M, *et al.* 2000. *Blood* 95:453. (Block)
4. Kawase M, *et al.* 2008. *J Virol*. 83:712. (Block) [PubMed](#)
5. Di Matteo P, *et al.* 2011. *J. Histochem. Cytochem.* 59:47. (IHC)

Description: CD13 is a 150-170 kD type II transmembrane glycoprotein also known as aminopeptidase N, APN, and gp150. This zinc metallopeptidase is expressed as a homodimer on granulocytes, myeloid progenitors, endothelial cells, epithelial cells and subset of granular lymphoid cells. It is not expressed on platelets or erythrocytes. CD13 is thought to be involved in the metabolism of many regulatory peptides and functions in antigen processing and the cleavage of chemokines such as MIP-1. CD13 serves as the cellular receptor for Coronavirus.

Antigen
References:

1. Shipp M, *et al.* 1993. *Blood* 82:1052.
2. Larsen S, *et al.* 1996. *J. Exp. Med.* 184:183.