

Brilliant Violet 785™ anti-human CD39

Catalog # / 2241195 / 25 tests
Size: 2241200 / 100 tests

Clone: A1

Isotype: Mouse IgG1, κ

Immunogen: PHA activated human lymphocytes

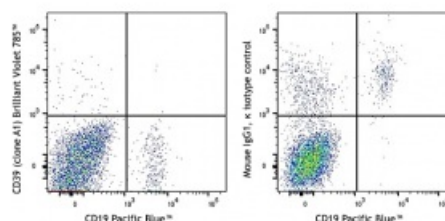
Reactivity: Human, Other

Preparation: The antibody was purified by affinity chromatography and conjugated with Brilliant Violet 785™ under optimal conditions. The solution is free of unconjugated Brilliant Violet 785™ and unconjugated antibody.

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

Workshop Number: HCDM listed

Concentration: Lot-specific



Human peripheral blood lymphocytes were stained with CD19 Pacific Blue™ and CD39 (clone A1) Brilliant Violet 785™ (left) or mouse IgG1, κ isotype control Brilliant Violet 785™ (right).

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 μ l per million cells in 100 μ l staining volume or 5 μ l per 100 μ l of whole blood.

Brilliant Violet 785™ excites at 405 nm and emits at 785 nm. The bandpass filter 780/60 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 785™ is a trademark of Sirigen Group Ltd.

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Application Notes: The A1 antibody binds to the human CD39 cell surface antigen and has been shown to block MHC independent target cell recognition by hapten-specific CTL. Additional reported applications (for the relevant formats) include: *in vitro* CD39 blockade³, immunofluorescence⁴, and immunohistochemistry⁶.

Application
References:

1. Aversa GG, *et al.* 1988. *Transplant. P.* 20:4952.
2. Aversa GG, *et al.* 1989. *Transplant. P.* 21:34950.
3. Borsellino G, *et al.* 2007. *Blood.* 110:1225. (Block)
4. Stockl J, *et al.* 2001. *J. Immunol.* 167:2724. (IF)
5. Sestak K, *et al.* 2007. *Vet. Immunol. Immunopathol.* 119:21.
6. Lyck L, *et al.* 2008. *J. Histochem. Cytochem.* 56:201. (IHC)

Description: Human CD39 is an integral membrane protein with two transmembrane domains. It exists as a homotetramer. Expression of CD39 is found on activated lymphocytes, a subset of T cells and B cells, and dendritic cells with weak staining on monocytes and granulocytes. CD39 and CD73 have been found on regulatory T cells, specifically the effector/memory like T cells. CD39 can hydrolyze both nucleoside triphosphates and diphosphates. CD39 is the dominant ecto nucleotidase of vascular and placental trophoblastic tissues and appears to modulate the functional expression of type 2 purinergic (P2) G protein coupled receptors (GPCRs). CD39 has intrinsic ecto-ATPase activity. Expression of CD39 is induced on T cells and increased on B cells as a late activation antigen.