

Brilliant Violet 711™ anti-human CD39

Catalog # / Size: 2241140 / 100 tests
2241135 / 25 tests

Clone: A1

Isotype: Mouse IgG1, κ

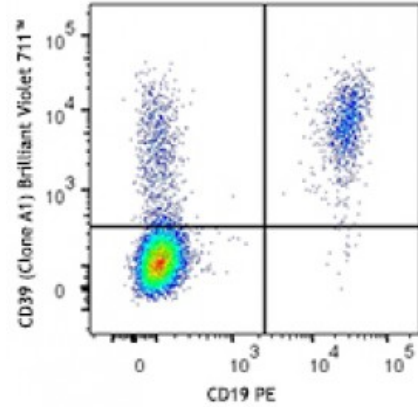
Immunogen: PHA activated human lymphocytes

Reactivity: Human

Preparation: The antibody was purified by affinity chromatography and conjugated with Brilliant Violet 711™ under optimal conditions. The solution is free of unconjugated Brilliant Violet 711™ and unconjugated antibody.

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

Concentration: Lot-specific

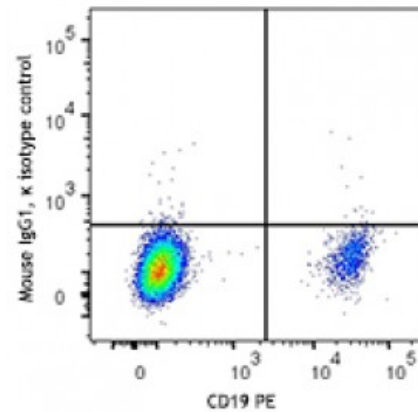


Human peripheral blood lymphocytes were stained with CD19 PE and CD39 (clone A1) Brilliant Violet 711™ (top) or mouse IgG1, κ isotype control (bottom).

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 711™ excites at 405 nm and emits at 711 nm. The bandpass filter 710/50 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 711™ is a trademark of Sirigen Group Ltd.

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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: 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. The LEAF™ purified antibody (Endotoxin <0.1 EU/microg, Azide-Free, 0.2 µm filtered) is recommended for blocking assays ([contact our custom solutions team](#)).

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.