Brilliant Violet 421™ anti-human CD69

Catalog # / Size: 2154650 / 100 tests

2154645 / 25 tests

Clone: FN50

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.

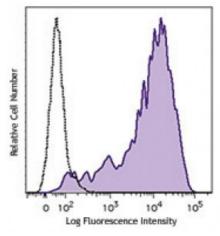
Formulation: Phosphate-buffered solution, pH 7.2,

containing 0.09% sodium azide and BSA

(origin USA).

Workshop Number: IV A91

Concentration: Lot-specific



Human peripheral blood lymphocytes were stimulated with PMA + ionomycin for 6 hours and then stained with CD69 (clone FN50) 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^{TM} excites at 405 nm and emits at 421 nm. The standard bandpass filter 450/50 nm is recommended for detection. Brilliant Violet 421^{TM} is a trademark of Sirigen Group Ltd.

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Application Notes:

Additional reported applications (for the relevant formats) include:

immunohistochemical staining of acetone-fixed frozen tissue sections2 and

immunofluorescence microscopy3.

Application References:

1. Knapp WB, et al. 1989. Leucocyte Typing IV. Oxford University Press. New York.

2. Sakkas LI, et al. 1998. Clin. and Diag. Lab. Immunol. 5:430. (IHC)

3. Kim JR, et al. 2005. BMC Immunol. 6:3. (IF)

4. Verjans GM, et al. 2007. P. Natl. Acad. Sci. USA 104:3496.

5. Lu H, et al. 2009. Toxicol Sci. 112:363. (FC) PubMed

6. Thakral D, et al. 2008. J. Immunol. 180:7431. (FC) PubMed

7. Yoshino N, et al. 2000. Exp. Anim. (Tokyo) 49:97. (FC)

Description:

CD69 is a 27-33 kD type II transmembrane protein also known as activation inducer molecule (AIM), very early activation antigen (VEA), and MLR3. It is a member of the C-type lectin family, expressed as a disulfide-linked homodimer. Other members of this receptor family include NKG2, NKR-P1 CD94, and Ly49. CD69 is transiently expressed on activated leukocytes including T cells, thymocytes, B cells, NK cells, neutrophils, and eosinophils. CD69 is constitutively expressed by a subset of medullary mature thymocytes, platelets, mantle B cells, and certain CD4⁺ T cells in germinal centers of normal lymph nodes. CD69 is involved in early events of lymphocyte, monocyte, and platelet activation, and has a functional role in redirected lysis mediated by activated NK cells.

Antigen References:

- 1. Schlossman S, *et al.* Eds. 1995. Leucocyte Typing V. Oxford University Press. New York.
- 2. Testi R, et al. 1994. Immunol. Today 15:479.