Brilliant Violet 421™ anti-mouse CD69

Catalog # / Size: 1122635 / 125 μl

1122640 / 500 µl

1122725 / 50 µg

Clone: H1.2F3

Isotype: Hamster IgG

Immunogen: Mouse dendritic epidermal T cell line

Y245

Reactivity: Mouse

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

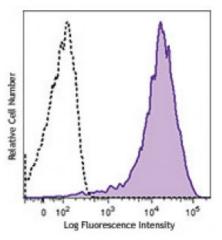
unconjugated antibody.

Formulation: Phosphate-buffered solution, pH 7.2,

containing 0.09% sodium azide and BSA

(origin USA).

Concentration: Lot-specific



PMA+ionomycin-stimulated (6 hours) C57BL/6 mouse splenocytes were stained with CD69 (clone H1.2F3) Brilliant Violet 421™ (filled histogram) or Armenian hamster IgG 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.

This product is subject to proprietary rights of Sirigen Inc. and is made and sold under license from Sirigen Inc. The purchase of this product conveys to the buyer a non-transferable right to use the purchased product for research purposes only. This product may not be resold or incorporated in any manner 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 H1.2F3 antibody has been reported to augment T cell activation. Additional reported applications (for the relevant formats) include: *in vitro* T cell and NK cell activation¹⁻³, immunohistochemistry^{4,5}, and immunoprecipitation1.

This antibody has been characterized in the literature as containing a λ () light chain.

Application

- 1. Yokoyama WM, et al. 1988. J. Immunol. 141:369. (IP)
- **References:** 2. Sobel ES, *et al.* 1993. *J. Immunol.* 150:673.
 - 3. Karlhofer FM, et al. 1991. J. Immunol. 146:3662.
 - 4. Zhou X, et al. 2005. J. Biol. Chem. 280:31240. (IHC)

- 5. Podd BS, et al. 2006. J. Immunol. 176:6532. (IHC)
- 6. Lawson BR, et al. 2007. J. Immunol. 178:5366.
- 7. Lee JW, et al. 2006. Nature Immunol. 8:181.
- 8. Epardaud M, et al. 2008. Cancer Res. 15:2972. PubMed
- 9. Jordan JM, et al. 2008. 76:3717. PubMed
- 10. Kenna TJ, et al. 2008. Blood 111:2091. PubMed
- 11. Ishikawa C, et al. 2013. Biochim Biophys Acta. 167:99. PubMed

Description:

CD69 is a 60 kD type II membrane protein composed of a 27/33 kD disulfide-linked homodimer, also known as Very Early Activation Antigen (VEA), AIM, EA1, MLR3, and gp34/28. It is expressed on a subset of thymocytes and platelets. CD69 is rapidly induced on activated T and B cells, neutrophils, and NK cells. It is a C-type lectin, closely related to the NKR-P1 and Ly-49 NK cell activation molecules. CD69 is involved in the early events of cell activation and thymocyte positive selection.

Antigen References:

- 1. Barclay AN, et al. 1997. The Leukocyte Antigen FactsBook Academic Press.
- 2. Testi R, et al. 1994. Immunol. Today 15:479.
- 3. Moretta A, et al. 1991. J. Exp. Med. 174:1393.
- 4. Yokoyama WM,