## **Brilliant Violet 421™ anti-mouse CD69**

**Catalog # / Size:** 1122725 / 50 μg

1122635 / 125 µl

 $1122640 / 500 \mu l$ 

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

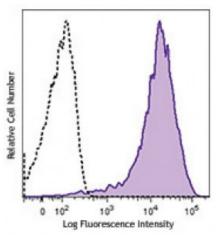
unconjugated antibody.

**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  $421^{\text{TM}}$  excites at 405 nm and emits at 421 nm. The standard bandpass filter 450/50 nm is recommended for detection. Brilliant Violet  $421^{\text{TM}}$  is a trademark of Sirigen Group Ltd.

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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 activation<sup>1-3</sup>, immunohistochemistry<sup>4,5</sup>, and immunoprecipitation1.

This antibody has been characterized in the literature as containing a  $\lambda$  ( ) 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,