Brilliant Violet 605™ anti-mouse CD69

Catalog # / Size: 1122645 / 125 μl

1122650 / 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 605™ under optimal conditions. The solution is free of unconjugated Brilliant Violet 605™ and

unconjugated antibody.

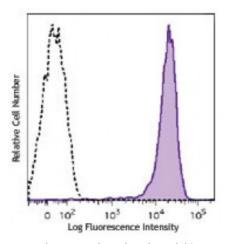
Formulation: Phosphate-buffered solution, pH 7.2,

containing 0.09% sodium azide and BSA

(origin USA).

Concentration: microg sizes: 0.2 mg/ml

microL sizes: lot-specific



PMA+ionomycin-stimulated (6 hours) C57BL/6 mouse splenocytes were stained with CD69 (clone H1.2F3) Brilliant Violet 605™ (filled

histogram).

Applications:

Applications: Flow Cytometry

Recommended

Usage:

Each lot of this antibody is quality control tested by immunofluorescent staining with flow cytometric analysis. For immunofluorescent staining using the microg size, the suggested use of this reagent is ≤ 0.5 microg per million cells in 100 microL volume. For immunofluorescent staining using the microL size, 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 605™ excites at 405 nm and emits at 603 nm. The bandpass filter 610/20 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 605™ 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 activation¹⁻³, immunohistochemistry^{4,5}, and immunoprecipitation1.

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

Application References:

- 1. Yokoyama WM, et al. 1988. J. Immunol. 141:369. (IP)
- 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,