

Spark NIR™ 685 anti-mouse CD69

Catalog # / Size: 1122785 / 25 µg
1122790 / 100 µg

Clone: H1.2F3

Isotype: Hamster IgG

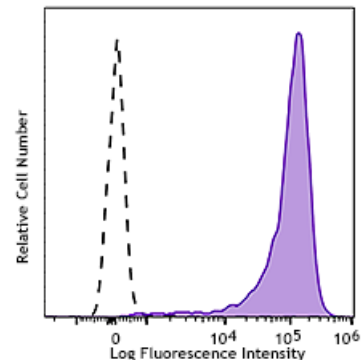
Immunogen: Mouse dendritic epidermal T cell line Y245

Reactivity: Mouse

Preparation: The antibody was purified by affinity chromatography and conjugated with Spark NIR™ 685 under optimal conditions.

Formulation: Phosphate-buffered solution, pH 7.2, containing 0.09% sodium azide

Concentration: 0.5 mg/mL



PMA and ionomycin stimulated C57BL/6 mouse splenocytes (six hours) were stained with CD69 (clone H1.2F3) Spark NIR™ 685 (filled histogram) or cells only (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 ≤ 0.5 µg per million cells in 100 µL volume. It is recommended that the reagent be titrated for optimal performance for each application.

* Spark NIR™ 685 has a maximum excitation of 665 nm and a maximum emission of 685 nm.

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 lambda (?) 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, *et al.* 1988. *J. Immunol.* 141:369.