

**Spark NIR™ 685 anti-mouse CD69**

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

**Clone:** H1.2F3

**Isotype:** Hamster IgG

**Immunogen:** Mouse dendritic epidermal T cell line Y245

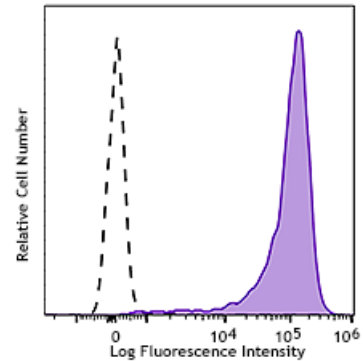
**Reactivity:** Mouse

**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

**Workshop Number:** 750 under optimal conditions.

**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:**

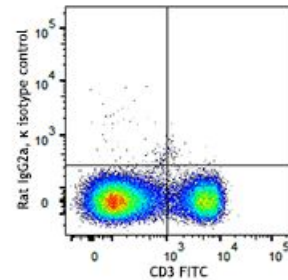
**Applications:** Flow Cytometry

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

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](#)
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**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.