SONY

# Product Data Sheet

## APC/Fire™ 750 anti-mouse CD69

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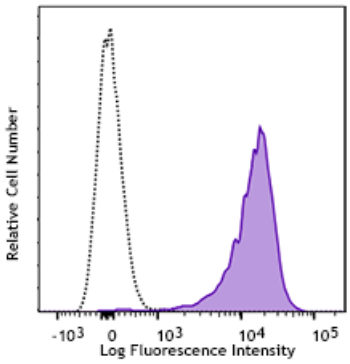
| **Catalog # / Size:** | 1122745 / 100 µg<br>1122740 / 25 µg |
| **Clone:** | H1.2F3 |
| **Isotype:** | Hamster IgG |
| **Immunogen:** | Mouse dendritic epidermal T cell line Y245 |
| **Reactivity:** | Mouse |
| **Preparation:** | The antibody was purified by affinity chromatography and conjugated with APC/Fire™ 750 under optimal conditions. |
| **Formulation:** | Phosphate-buffered solution, pH 7.2, containing 0.09% sodium azide. |
| **Workshop Number:** | 750 under optimal conditions. |
| **Concentration:** | 0.2 mg/ml |




PMA+ionomycin-stimulated (4 hours) C57BL/6 mouse splenocytes were stained with CD69 (clone H1.2F3) APC/Fire™ 750 (filled histogram) or Armenian hamster IgG APC/Fire™ 750 isotype control (open histogram).

## Applications:

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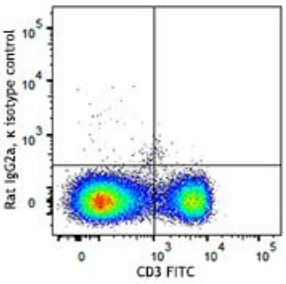
| **Applications:** | Flow Cytometry |
| **Recommended Usage:** | Each lot of this antibody is quality control tested by immunofluorescent staining with flow cytometric analysis. For flow cytometric staining, the suggested use of this reagent is ≤ 0.5 µg per million cells in 100 µl volume. It is recommended that the reagent be titrated for optimal performance for each application.<br><br>* APC/Fire™ 750 has a maximum excitation of 650 nm and a maximum emission of 787 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[1-3], immunohistochemistry[4,5], and immunoprecipitation[1].<br><br>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.