PE anti-mouse CD69 Antibody

Catalog# / Size	104507 / 50 µg 104508 / 200 µg
Clone	H1.2F3
Other Names	Very Early Activation Antigen (VEA), AIM, EA1, MLR3, gp34/28
Isotype	Armenian Hamster IgG
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.

Product Details

Reactivity	Mouse
Antibody Type	Monoclonal
Host Species	Armenian Hamster
Immunogen	Mouse dendritic epidermal T cell line Y245
Formulation	Phosphate-buffered solution, pH 7.2, containing 0.09% sodium azide.
Preparation	The antibody was purified by affinity chromatography, and conjugated with PE under optimal conditions.
Concentration	0.2 mg/ml
Storage & Handling	The antibody solution should be stored undiluted between 2°C and 8°C, and protected from prolonged exposure to light. **Do not freeze.**
Application	FC - Quality tested
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 ≤0.25 µg per million cells in 100 µl volume. It is recommended that the reagent be titrated for optimal performance for each application.
Excitation Laser	Blue Laser (488 nm) Green Laser (532 nm)/Yellow-Green Laser (561 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]. This antibody has been characterized in the literature as containing a lambda (λ) light chain.

Application References

(PubMed link indicates BioLegend citation)

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
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11. Ishikawa C, et al. 2013. Biochim Biophys Acta. 167:99. PubMed

Product Citations

1. Holan V, et al. 2010. J Immunol. 184:2124. PubMed
2. Huang Z, et al. 2012. J Immunol. 188:5867. PubMed
3. Yuan Z, et al. 2011. Vaccine. 29:6614. PubMed
4. Kmieciak M, et al. 2011. Breast Cancer Res Treat. 126:385. PubMed
5. Passos C, et al. 2014. Food Chem. 15:161. PubMed
6. Charlton J, et al. 2015. PLoS One. 10:119200. PubMed

7. Artinger K, et al. 2015. PLoS One. 10: 0135087. PubMed
8. Olguín J, et al. 2015. Microbes Infect. 17: 586-595. PubMed
9. Jang A, et al. 2015. Life Sci . 135: 138-146. PubMed
10. Sido J, et al. 2015. J Leukoc Biol. 98: 435-447. PubMed
11. Guo Z, et al. 2016. Nat Commun. 7:10307. PubMed
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RRID

AB_313110 (BioLegend Cat. No. 104507)
AB_313111 (BioLegend Cat. No. 104508)

Antigen Details

Structure

C-type lectin, 27/33 kD

Distribution

Activated T cells and B cells, NK cells, granulocytes, thymocytes, platelets

Function

Lymphocyte activation

Cell Type

B cells, Granulocytes, NK cells, Platelets, T cells, Thymocytes, Tregs

Biology Area

Costimulatory Molecules, Immunology, Innate Immunity

Molecular Family

CD Molecules

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.

Gene ID

12515

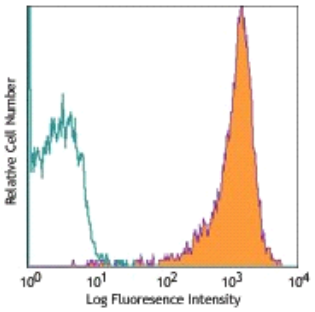
Related Protocols

Cell Surface Flow Cytometry Staining Protocol

Other Formats

Biotin anti-mouse CD69, FITC anti-mouse CD69, PE/Cyanine5 anti-mouse CD69, Purified anti-mouse CD69, PE/Cyanine7 anti-mouse CD69, APC anti-mouse CD69, Alexa Fluor® 488 anti-mouse CD69, Alexa Fluor® 647 anti-mouse CD69, PerCP anti-mouse CD69, PerCP/Cyanine5.5 anti-mouse CD69, Pacific Blue™ anti-mouse CD69, Brilliant Violet 421™ anti-mouse CD69, APC/Cyanine7 anti-mouse CD69, Brilliant Violet 605™ anti-mouse CD69, Brilliant Violet 510™ anti-mouse CD69, Purified anti-mouse CD69 (Maxpar® Ready), PE/Dazzle™ 594 anti-mouse CD69, Brilliant Violet 711™ anti-mouse CD69, Alexa Fluor® 700 anti-mouse CD69, Brilliant Violet 650™ anti-mouse CD69, Brilliant Violet 785™ anti-mouse CD69, TotalSeq™-A0197 anti-mouse CD69, APC/Fire™ 750 anti-mouse CD69, TotalSeq™-C0197 anti-mouse CD69, TotalSeq™-B0197 anti-mouse CD69, KIRAVIA Blue 520™ anti-mouse CD69, Spark NIR™ 685 anti-mouse CD69

Product Data



PMA+ionomycin-stimulated C57BL/6 mouse splenocytes (6 hours) stained with H1.2F3 PE

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