

## PE/Cyanine5 anti-mouse CD69 Antibody

<b>Catalog# / Size</b>	104509 / 25 µg 104510 / 100 µg
<b>Clone</b>	H1.2F3
<b>Regulatory Status</b>	RUO
<b>Other Names</b>	Very Early Activation Antigen (VEA), AIM, EA1, MLR3, gp34/28
<b>Isotype</b>	Armenian Hamster IgG
<b>Description</b>	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

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<b>Verified Reactivity</b>	Mouse
<b>Antibody Type</b>	Monoclonal
<b>Host Species</b>	Armenian Hamster
<b>Immunogen</b>	Mouse dendritic epidermal T cell line Y245
<b>Formulation</b>	Phosphate-buffered solution, pH 7.2, containing 0.09% sodium azide.
<b>Preparation</b>	The antibody was purified by affinity chromatography, and conjugated with PE/Cyanine5 under optimal conditions.
<b>Concentration</b>	0.2 mg/ml
<b>Storage &amp; Handling</b>	The antibody solution should be stored undiluted between 2°C and 8°C, and protected from prolonged exposure to light. <b>Do not freeze.</b>
<b>Application</b>	<a href="#">FC - Quality tested</a>
<b>Recommended Usage</b>	Each lot of this antibody is quality control tested by <a href="#">immunofluorescent staining with flow cytometric analysis</a> . For flow cytometric staining, the suggested use of this reagent is = 0.25 µg per 10 <sup>6</sup> cells in 100 µl volume. It is recommended that the reagent be titrated for optimal performance for each application.
<b>Excitation Laser</b>	Blue Laser (488 nm) Green Laser (532 nm)/Yellow-Green Laser (561 nm)
<b>Application Notes</b>	The H1.2F3 antibody has been reported to augment T cell activation. Additional reported applications (for the relevant formats) include: <i>in vitro</i> 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.
<b>Additional Product Notes</b>	BioLegend is in the process of converting the name PE/Cy5 to PE/Cyanine5. The dye molecule remains the same, so you should expect the same quality and performance from our PE/Cyanine5 products. Please contact <a href="#">Technical Service</a> if you have any questions.
<b>Application References</b>	<ol style="list-style-type: none"> <li>1. Yokoyama WM, <i>et al.</i> 1988. <i>J. Immunol.</i> 141:369. (IP)</li> <li>2. Sobel ES, <i>et al.</i> 1993. <i>J. Immunol.</i> 150:673.</li> <li>3. Karlhofer FM, <i>et al.</i> 1991. <i>J. Immunol.</i> 146:3662.</li> <li>4. Zhou X, <i>et al.</i> 2005. <i>J. Biol. Chem.</i> 280:31240. (IHC)</li> <li>5. Podd BS, <i>et al.</i> 2006. <i>J. Immunol.</i> 176:6532. (IHC)</li> <li>6. Lawson BR, <i>et al.</i> 2007. <i>J. Immunol.</i> 178:5366.</li> <li>7. Lee JW, <i>et al.</i> 2006. <i>Nature Immunol.</i> 8:181.</li> </ol>
<b>(PubMed link indicates BioLegend citation)</b>	

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](#)

## Product Citations

1. Baptista AP *et al.* 2019. *Immunity.* 50(5):1188-1201 . [PubMed](#)
2. Habib S, *et al.* 2018. *Infect Immun.* 86:e00019. [PubMed](#)
3. Beltra JC, *et al.* 2020. *Immunity.* 52(5):825-841. [PubMed](#)
4. Xiong W, *et al.* 2022. *Adv Sci (Weinh).* 9:e2103029. [PubMed](#)
5. Pasciuto E, *et al.* 2020. *Cell.* 182:625. [PubMed](#)
6. Wu S, *et al.* 2021. *Nat Cancer.* 2:189. [PubMed](#)
7. Hsu M, *et al.* 2022. *Nat Immunol.* 23:581. [PubMed](#)
8. Goldfarb Y, *et al.* 2011. *Brain Behav Immun.* 25:67. [PubMed](#)
9. Aguilera TA, *et al.* 2020. *Clin Cancer Res.* 26:2972. [PubMed](#)

## RRID

AB\_313112 (BioLegend Cat. No. 104509)  
 AB\_313113 (BioLegend Cat. No. 104510)

## Antigen Details

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<b>Structure</b>	C-type lectin, 27/33 kD
<b>Distribution</b>	Activated T cells and B cells, NK cells, granulocytes, thymocytes, platelets
<b>Function</b>	Lymphocyte activation
<b>Cell Type</b>	B cells, Granulocytes, NK cells, Platelets, T cells, Thymocytes, Tregs
<b>Biology Area</b>	Costimulatory Molecules, Immunology, Innate Immunity
<b>Molecular Family</b>	CD Molecules
<b>Antigen References</b>	<ol style="list-style-type: none"> <li>1. Barclay AN, <i>et al.</i> 1997. <i>The Leukocyte Antigen FactsBook</i> Academic Press.</li> <li>2. Testi R, <i>et al.</i> 1994. <i>Immunol. Today</i> 15:479.</li> <li>3. Moretta A, <i>et al.</i> 1991. <i>J. Exp. Med.</i> 174:1393.</li> <li>4. Yokoyama WM, <i>et al.</i> 1988. <i>J. Immunol.</i> 141:369.</li> </ol>
<b>Gene ID</b>	<a href="#">12515</a>

## Related Protocols

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[Cell Surface Flow Cytometry Staining Protocol](#)

## Other Formats

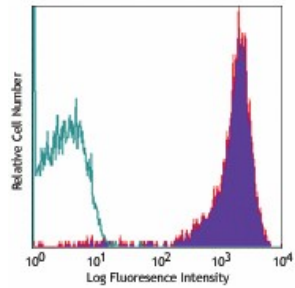
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Biotin anti-mouse CD69, FITC anti-mouse CD69, PE anti-mouse CD69, PE/Cyanine5 anti-mouse CD69, Purified anti-mouse CD69, PE/Cyanine7 anti-mouse CD69, APC anti-mouse CD69, Alexa Fluor® 488 anti-mouse CD69, Alexa Fluor® 647 anti-mouse CD69, PerCP anti-mouse 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, Spark Red™ 718 anti-mouse CD69

## Product Data

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PMA+ionomycin-stimulated C57BL/6 mouse splenocytes (6 hours) stained with H1.2F3 PE/Cyanine5



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