

## Alexa Fluor® 647 anti-mouse CD69 Antibody

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| <b>Catalog# / Size</b>   | 104517 / 25 µg<br>104518 / 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 Alexa Fluor® 647 under optimal conditions.   |
| <b>Concentration</b>                              | 0.5 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>                          | <p>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.</p> <p>* Alexa Fluor® 647 has a maximum emission of 668 nm when it is excited at 633nm / 635nm.</p> <p>Alexa Fluor® and Pacific Blue™ are trademarks of Life Technologies Corporation.</p> <p><a href="#">View full statement regarding label licenses</a></p> |
| <b>Excitation Laser</b>                           | Red Laser (633 nm)  |
| <b>Application Notes</b>                          | <p>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>.</p> <p>This antibody has been characterized in the literature as containing a lambda (?) light chain.</p>   |
| <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></ol>   |
| <b>(PubMed link indicates BioLegend citation)</b> |   |

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](#)

### Product Citations

1. Benechet AP, *et al.* 2019. *Nature.* 574:200. [PubMed](#)
2. Jiang Y, *et al.* 2020. *Adv Mater.* 32:e2001808. [PubMed](#)
3. De Simone G, *et al.* 2021. *Immunity.* .: [PubMed](#)
4. Izsepi E, *et al.* 2012. *Immunol Lett.* 143:106. [PubMed](#)
5. Pei B, *et al.* 2015. *J Immunol.* 194:5872. [PubMed](#)
6. Holcman M, *et al.* 2009. *J Immunol.* 183:1133. [PubMed](#)
7. Schwaiger T, *et al.* 2013. *Gut.* 63:494. [PubMed](#)

### RRID

AB\_492848 (BioLegend Cat. No. 104517)  
AB\_492847 (BioLegend Cat. No. 104518)

## 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

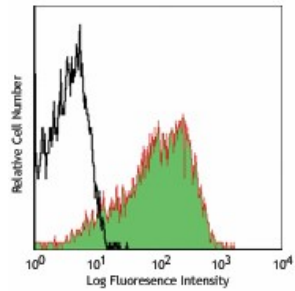
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Biotin anti-mouse CD69, FITC anti-mouse CD69, PE anti-mouse CD69, PE/Cyanine5 anti-mouse CD69, Purified anti-mouse CD69, PE/Cyanine7 anti-mouse CD69, APC anti-mouse CD69, Alexa Fluor® 488 anti-mouse CD69, Alexa Fluor® 647 anti-mouse CD69, PerCP anti-mouse 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 (6 hours)  
C57BL/6 mouse splenocytes stained  
with H1.2F3 Alexa Fluor® 647



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