# Brilliant Violet 510™ anti-mouse CD69 Antibody

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| **Catalog# / Size** | 104531 / 125 µL<br>104532 / 500 µL |
| **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

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| **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 and BSA (origin USA). |
| **Preparation** | The antibody was purified by affinity chromatography and conjugated with Brilliant Violet 510™ under optimal conditions. |
| **Concentration** | Lot-specific (please contact technical support for concentration and total µg amount, or use our Lookup tool if you have a lot number.) |
| **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 5 µl per million cells in 100 µl staining volume or 5 µl per 100 µl of whole blood. It is recommended that the reagent be titrated for optimal performance for each application.<br><br>Brilliant Violet 510™ excites at 405 nm and emits at 510 nm. The bandpass filter 510/50 nm is recommended for detection, although filter optimization may be required depending on other fluorophores used. **Be sure to verify that your cytometer configuration and software setup are appropriate for detecting this channel.** Refer to your instrument manual or manufacturer for support. Brilliant Violet 510™ is a trademark of Sirigen Group Ltd.<br><br>Learn more about Brilliant Violet™.<br><br>This product is subject to proprietary rights of Sirigen Inc. and is made and sold under license from Sirigen Inc. The purchase of this product conveys to the buyer a non-transferable right to use the purchased product for research purposes only. This product may not be resold or incorporated in any manner into another product for resale. Any use for therapeutics or diagnostics is strictly prohibited. This product is covered by U.S. Patent(s), pending patent applications and foreign equivalents. |
| **Excitation Laser** | Violet Laser (405 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 (λ) light chain. |
| **Application References**<br><br>**(PubMed link indicates BioLegend citation)** | 1. Yokoyama WM, et al. 1988. J. Immunol. 141:369. (IP)<br>2. Sobel ES, et al. 1993. J. Immunol. 150:673.<br>3. Karlhofer FM, et al. 1991. J. Immunol. 146:3662.<br>4. Zhou X, et al. 2005. J. Biol. Chem. 280:31240. (IHC)<br>5. Podd BS, et al. 2006. J. Immunol. 176:6532. (IHC)<br>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

**Product Citations**

1. Hamilton J, et al. 2015. J Immunol. 194:5022. PubMed
2. Sendler M, et al. 2020. Gastroenterology. 158:253. PubMed

**RRID**

AB_2562326 (BioLegend Cat. No. 104531)
AB_2562327 (BioLegend Cat. No. 104532)

## 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

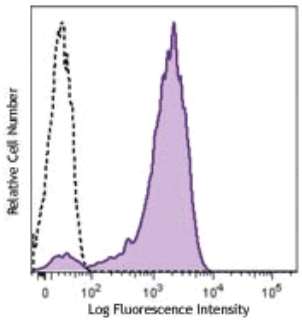
## Related Protocols

Cell Surface Flow Cytometry Staining Protocol

## Other Formats

Biotin anti-mouse CD69, FITC anti-mouse CD69, PE 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, 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 and ionomycin-stimulated C57BL/6 mouse splenocytes (6 hours) were stained with CD69 (clone H1.2F3) Brilliant Violet 510™ (filled histogram) or Armenian Hamster IgG Brilliant Violet 510™ isotype control (open histogram).

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