

## Brilliant Violet 605™ anti-human CD69 Antibody

<b>Catalog# / Size</b>	310937 / 25 tests 310938 / 100 tests
<b>Clone</b>	FN50
<b>Workshop</b>	IV A91
<b>Other Names</b>	Very Early Activation Antigen (VEA), Activation inducer molecule (AIM)
<b>Isotype</b>	Mouse IgG1, κ
<b>Description</b>	CD69 is a 27-33 kD type II transmembrane protein also known as activation inducer molecule (AIM), very early activation antigen (VEA), and MLR3. It is a member of the C-type lectin family, expressed as a disulfide-linked homodimer. Other members of this receptor family include NKG2, NKR-P1 CD94, and Ly49. CD69 is transiently expressed on activated leukocytes including T cells, thymocytes, B cells, NK cells, neutrophils, and eosinophils. CD69 is constitutively expressed by a subset of medullary mature thymocytes, platelets, mantle B cells, and certain CD4 <sup>+</sup> T cells in germinal centers of normal lymph nodes. CD69 is involved in early events of lymphocyte, monocyte, and platelet activation, and has a functional role in redirected lysis mediated by activated NK cells.

### Product Details

<b>Reactivity</b>	Human, African Green, Baboon, Chimpanzee, Cynomolgus, Pigtailed Macaque, Rhesus
<b>Antibody Type</b>	Monoclonal
<b>Host Species</b>	Mouse
<b>Formulation</b>	Phosphate-buffered solution, pH 7.2, containing 0.09% sodium azide and BSA (origin USA).
<b>Preparation</b>	The antibody was purified by affinity chromatography and conjugated with Brilliant Violet 605™ under optimal conditions.
<b>Concentration</b>	Lot-specific (please contact <a href="#">technical support</a> for concentration and total µg amount, or use our <a href="#">Lookup tool</a> if you have a lot number.)
<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>	FC - Quality tested
<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 5 µl per million cells in 100 µl staining volume or 5 µl per 100 µl of whole blood.  Brilliant Violet 605™ excites at 405 nm and emits at 603 nm. The bandpass filter 610/20 nm is recommended for detection, although filter optimization may be required depending on other fluorophores used. <b>Be sure to verify that your cytometer configuration and software setup are appropriate for detecting this channel.</b> Refer to your instrument manual or manufacturer for support. Brilliant Violet 605™ is a trademark of Sirigen Group Ltd.  <a href="#">Learn more about Brilliant Violet™.</a>  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.
<b>Excitation Laser</b>	Violet Laser (405 nm)
<b>Application Notes</b>	Additional reported applications (for the relevant formats) include: immunohistochemical staining of acetone-fixed frozen tissue sections <sup>2</sup> and immunofluorescence microscopy <sup>3</sup> .

#### Application References

(PubMed link indicates BioLegend citation)

- Knapp WB, et al. 1989. Leucocyte Typing IV. Oxford University Press. New York.
- Sakkas LI, et al. 1998. Clin. and Diag. Lab. Immunol. 5:430. (IHC)
- Kim JR, et al. 2005. BMC Immunol. 6:3. (IF)
- Verjans GM, et al. 2007. P. Natl. Acad. Sci. USA 104:3496.
- Lu H, et al. 2009. Toxicol Sci. 112:363. (FC) PubMed
- Thakral D, et al. 2008. J. Immunol. 180:7431. (FC) PubMed
- Yoshino N, et al. 2000. Exp. Anim. (Tokyo) 49:97. (FC)

## Product Citations

1. Tsai C, et al. 2015. J Immunol. 194:3890. PubMed
2. Roberts E, et al. 2016. PLoS One. 11:e0168488. PubMed
3. Sagebiel AF, et al. 2019. Nat Commun. 10:975. PubMed
4. Hunter S, et al. 2018. J Hepatol. 69:654. PubMed
5. Swadling L, et al. 2020. Cell Rep. 30:687. PubMed

## RRID

AB\_2562306 (BioLegend Cat. No. 310937)  
AB\_2562307 (BioLegend Cat. No. 310938)

## Antigen Details

<b>Structure</b>	C-type lectin, type II glycoprotein, 28/32 kD
<b>Distribution</b>	Activated T cells, B cells, NK cells, granulocytes, thymocytes, platelets, Langerhans cells
<b>Function</b>	Lymphocyte, monocyte, and platelet activation, NK cell killing
<b>Cell Type</b>	B cells, Granulocytes, Langerhans cells, NK cells, Platelets, T cells, Thymocytes, Tregs
<b>Biology Area</b>	Costimulatory Molecules, Immunology
<b>Molecular Family</b>	CD Molecules
<b>Antigen References</b>	1. Schlossman S, et al. Eds. 1995. Leucocyte Typing V. Oxford University Press. New York. 2. Testi R, et al. 1994. Immunol. Today 15:479.
<b>Gene ID</b>	969

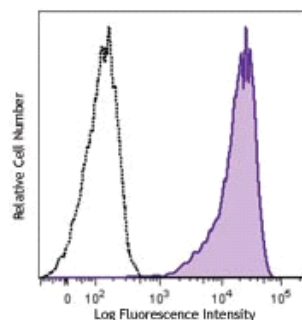
## Related Protocols

[Cell Surface Flow Cytometry Staining Protocol](#)

## Other Formats

Purified anti-human CD69, FITC anti-human CD69, PE anti-human CD69, PE/Cyanine5 anti-human CD69, APC anti-human CD69, APC/Cyanine7 anti-human CD69, PE/Cyanine7 anti-human CD69, Alexa Fluor® 488 anti-human CD69, Alexa Fluor® 647 anti-human CD69, Pacific Blue™ anti-human CD69, Alexa Fluor® 700 anti-human CD69, Biotin anti-human CD69, PerCP/Cyanine5.5 anti-human CD69, PerCP anti-human CD69, Brilliant Violet 421™ anti-human CD69, Brilliant Violet 785™ anti-human CD69, Brilliant Violet 650™ anti-human CD69, Brilliant Violet 510™ anti-human CD69, Purified anti-human CD69 (Maxpar® Ready), PE/Dazzle™ 594 anti-human CD69, Brilliant Violet 711™ anti-human CD69, APC/Fire™ 750 anti-human CD69, TotalSeq™-A0146 anti-human CD69, TotalSeq™-B0146 anti-human CD69, TotalSeq™-C0146 anti-human CD69, Brilliant Violet 750™ anti-human CD69, KIRAVIA Blue 520™ anti-human CD69

## Product Data



PMA<sup>+</sup> ionomycin-stimulated (6 hours) human peripheral blood lymphocytes were stained with CD69 (clone FN50) Brilliant Violet 605™ (filled histogram) or mouse IgG1, κ Brilliant Violet 605™ isotype control (open histogram).

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