

## GMP PE anti-human CD69 Antibody

<b>Catalog# / Size</b>	260302 / 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, $\kappa$
<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
<b>Reported Reactivity</b>	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 0.2% (w/v) BSA (origin USA) and a stabilizer.
<b>Preparation</b>	The antibody was purified by affinity chromatography and conjugated with PE under optimal conditions.
<b>Concentration</b>	50.0 $\mu\text{g}/\text{mL}$
<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 5 $\mu\text{L}$ per million cells in 100 $\mu\text{L}$ staining volume or 5 $\mu\text{L}$ per 100 $\mu\text{L}$ of whole blood. 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>	Additional reported applications (for the relevant formats) include: immunohistochemical staining of acetone-fixed frozen tissue sections <sup>2</sup> , immunofluorescence microscopy <sup>3</sup> , and spatial biology (IBEX) <sup>8,9</sup> .
<b>Application References</b>	<ol style="list-style-type: none"><li>Knapp WB, <i>et al.</i> 1989. Leucocyte Typing IV. Oxford University Press. New York.</li><li>Sakkas LI, <i>et al.</i> 1998. <i>Clin. and Diag. Lab. Immunol.</i> 5:430. (IHC)</li><li>Kim JR, <i>et al.</i> 2005. <i>BMC Immunol.</i> 6:3. (IF)</li><li>Verjans GM, <i>et al.</i> 2007. <i>P. Natl. Acad. Sci. USA</i> 104:3496.</li><li>Lu H, <i>et al.</i> 2009. <i>Toxicol Sci.</i> 112:363. (FC) <a href="#">PubMed</a></li><li>Thakral D, <i>et al.</i> 2008. <i>J. Immunol.</i> 180:7431. (FC) <a href="#">PubMed</a></li><li>Yoshino N, <i>et al.</i> 2000. <i>Exp. Anim. (Tokyo)</i> 49:97. (FC)</li><li>Radtke AJ, <i>et al.</i> 2020. <i>Proc Natl Acad Sci USA.</i> 117:33455-33465. (SB) <a href="#">PubMed</a></li><li>Radtke AJ, <i>et al.</i> 2022. <i>Nat Protoc.</i> 17:378-401. (SB) <a href="#">PubMed</a></li></ol>
<b>(PubMed link indicates BioLegend citation)</b>	

## Disclaimer

**GMP RUO Flow Cytometry Antibodies.** BioLegend GMP RUO fluorophore conjugated antibodies are manufactured in a dedicated GMP facility and compliant with ISO 13485:2016. For research use only. Not for use in diagnostic or therapeutic procedures. Our processes include:

- Batch-to-batch consistency
- Material traceability
- Documented procedures
- Documented employee training
- Equipment maintenance and monitoring records
- Lot-specific certificates of analysis
- Quality audits per ISO 13485:2016
- QA review of released products

## 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, <i>et al.</i> Eds. 1995. Leucocyte Typing V. Oxford University Press. New York. 2. Testi R, <i>et al.</i> 1994. <i>Immunol. Today</i> 15:479.
<b>Gene ID</b>	<a href="#">969</a>

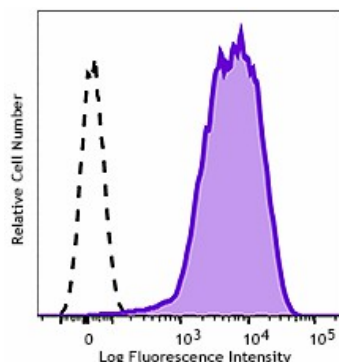
## Related Protocols

[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, Brilliant Violet 605™ 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, Spark NIR™ 685 anti-human CD69 Antibody, PE/Fire™ 640 anti-human CD69, Spark YG™ 581 anti-human CD69, TotalSeq™-D0146 anti-human CD69, Spark Blue™ 550 anti-human CD69

## Product Data



Typical results from Cell Activation Cocktail (without Brefeldin A, BioLegend Cat#423301) stimulated (3 hours) human peripheral blood lymphocytes stained either with FN50 PE used at 5 µL/test (filled histogram) or with an isotype control (open histogram).

For research use only. Not for resale. BioLegend will not be held responsible for patent infringement or other violations that may occur with the use of our products.

\*These products may be covered by one or more Limited Use Label Licenses (see the BioLegend Catalog or our website, [www.biolegend.com/ordering#license](http://www.biolegend.com/ordering#license)). BioLegend products may not be transferred to third parties, resold, modified for resale, or used to manufacture commercial products, reverse engineer functionally similar materials, or to provide a service to third parties without written approval of BioLegend. By use of these products you accept the terms and conditions of all applicable Limited Use Label Licenses.

8999 BioLegend Way, San Diego, CA 92121 [www.biolegend.com](http://www.biolegend.com)  
Toll-Free Phone: 1-877-Bio-Legend (246-5343) Phone: (858) 768-5800 Fax: (877) 455-9587