

Alexa Fluor[®] 700 anti-human CD69 Antibody

Catalog# / Size	310921 / 25 µg 310922 / 100 µg
Clone	FN50
Regulatory Status	RUO
Workshop	IV A91
Other Names	Very Early Activation Antigen (VEA), Activation inducer molecule (AIM)
Isotype	Mouse IgG1, κ
Description	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 ⁺ 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

Verified Reactivity	Human
Reported Reactivity	African Green, Baboon, Chimpanzee, Cynomolgus, Pigtailed Macaque, Rhesus
Antibody Type	Monoclonal
Host Species	Mouse
Formulation	Phosphate-buffered solution, pH 7.2, containing 0.09% sodium azide.
Preparation	The antibody was purified by affinity chromatography and conjugated with Alexa Fluor [®] 700 under optimal conditions.
Concentration	0.5 mg/ml
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	<p>Each lot of this antibody is quality control tested by immunofluorescent staining with flow cytometric analysis. The suggested use of this reagent is ≤ 0.5 µg per 10⁶ cells in 100 µl volume or 100 µl of whole blood. It is highly recommended that the reagent be titrated for optimal performance for each application.</p> <p>* Alexa Fluor[®] 700 has a maximum emission of 719 nm when it is excited at 633nm / 635nm. Prior to using Alexa Fluor[®] 700 conjugate for flow cytometric analysis, please verify your flow cytometer's capability of exciting and detecting the fluorochrome.</p> <p>Alexa Fluor[®] and Pacific Blue™ are trademarks of Life Technologies Corporation.</p> <p>View full statement regarding label licenses</p>
Excitation Laser	Red Laser (633 nm)
Application Notes	Additional reported applications (for the relevant formats) include: immunohistochemical staining of acetone-fixed frozen tissue sections ² , immunofluorescence microscopy ³ , and spatial biology (IBEX) ^{8,9} .
Application References	1. Knapp WB, <i>et al.</i> 1989. Leucocyte Typing IV. Oxford University Press. New York.

(PubMed link indicates BioLegend citation)

2. Sakkas LI, *et al.* 1998. *Clin. and Diag. Lab. Immunol.* 5:430. (IHC)
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4. Verjans GM, *et al.* 2007. *P. Natl. Acad. Sci. USA* 104:3496.
5. Lu H, *et al.* 2009. *Toxicol Sci.* 112:363. (FC) [PubMed](#)
6. Thakral D, *et al.* 2008. *J. Immunol.* 180:7431. (FC) [PubMed](#)
7. Yoshino N, *et al.* 2000. *Exp. Anim. (Tokyo)* 49:97. (FC)
8. Radtke AJ, *et al.* 2020. *Proc Natl Acad Sci USA.* 117:33455-33465. (SB) [PubMed](#)
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Product Citations

1. Tan AT, *et al.* 2021. *J Clin Invest.* 131:. [PubMed](#)
2. Havenith S, *et al.* 2014. *Int Immunol.* 26:183. [PubMed](#)
3. Pedersen JG, *et al.* 2021. *Front Microbiol.* 12:763030. [PubMed](#)
4. Kalimuddin S, *et al.* 2021. *Med.* 2(6):682-688.e4. [PubMed](#)
5. Pattekar A, *et al.* 2021. *Cellular and Molecular Gastroenterology and Hepatology.* 11(5):1267-1289. [PubMed](#)
6. Ries M, *et al.* 2013. *J Leukoc Biol.* 94:123. [PubMed](#)
7. Hazenberg MD, *et al.* 2019. *Blood Adv.* 2.659722222. [PubMed](#)
8. Lim JME, *et al.* 2022. *Cell Rep Med.* 3:100793. [PubMed](#)
9. Chen ZY, *et al.* 2020. *Front Microbiol.* 1.778472222. [PubMed](#)
10. Nguyen NT, *et al.* 2021. *Nat Nanotechnol.* 16:1424. [PubMed](#)
11. Fierle JK, *et al.* 2021. *Cell Reports Medicine.* 2(8):100362. [PubMed](#)

RRID

AB_493774 (BioLegend Cat. No. 310921)
AB_493775 (BioLegend Cat. No. 310922)

Antigen Details

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

Related Protocols

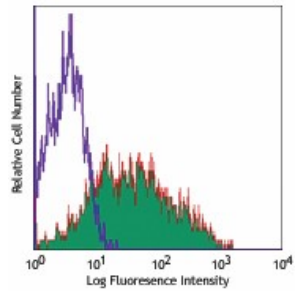
[Cell Surface Flow Cytometry Staining Protocol](#)

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, 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

PMA + Ionomycin-stimulated (5 hours)
human peripheral blood lymphocytes
stained with FN50 Alexa Fluor® 700



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