

Purified anti-human CD69 (Maxpar[®] Ready) Antibody

Catalog# / Size	310939 / 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 and EDTA.
Preparation	The antibody was purified by affinity chromatography.
Concentration	1.0 mg/ml
Storage & Handling	The antibody solution should be stored undiluted between 2°C and 8°C.
Application	FC - Quality tested CyTOF[®] - Verified
Recommended Usage	This product is suitable for use with the Maxpar[®] Metal Labeling Kits . For metal labeling using Maxpar [®] Ready antibodies, proceed directly to the step to Partially Reduce the Antibody by adding 100 µl of Maxpar [®] Ready antibody to 100 µl of 4 mM TCEP-R in a 50 kDa filter and continue with the protocol. Always refer to the latest version of Maxpar [®] User Guide when conjugating Maxpar [®] Ready antibodies.
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} .
Additional Product Notes	Maxpar [®] is a registered trademark of Standard BioTools Inc.
Application References	1. Knapp WB, <i>et al.</i> 1989. Leucocyte Typing IV. Oxford University Press. New York. 2. Sakkas LI, <i>et al.</i> 1998. <i>Clin. and Diag. Lab. Immunol.</i> 5:430. (IHC) 3. Kim JR, <i>et al.</i> 2005. <i>BMC Immunol.</i> 6:3. (IF) 4. Verjans GM, <i>et al.</i> 2007. <i>P. Natl. Acad. Sci. USA</i> 104:3496. 5. Lu H, <i>et al.</i> 2009. <i>Toxicol Sci.</i> 112:363. (FC) PubMed 6. Thakral D, <i>et al.</i> 2008. <i>J. Immunol.</i> 180:7431. (FC) PubMed 7. Yoshino N, <i>et al.</i> 2000. <i>Exp. Anim. (Tokyo)</i> 49:97. (FC) 8. Radtke AJ, <i>et al.</i> 2020. <i>Proc Natl Acad Sci USA.</i> 117:33455-33465. (SB) PubMed 9. Radtke AJ, <i>et al.</i> 2022. <i>Nat Protoc.</i> 17:378-401. (SB) PubMed
(PubMed link indicates BioLegend citation)	

Product Citations

1. Gadalla R, *et al.* 2022. STAR Protoc. 3:101643. [PubMed](#)
2. Stras SF, *et al.* 2020. Developmental Cell. 51(3):357-373.e5. [PubMed](#)
3. Nugent JL, *et al.* 2021. iScience. 24:103421. [PubMed](#)
4. Gide TN, *et al.* 2019. Cancer Cell. 35:238. [PubMed](#)
5. Michelozzi IM, *et al.* 2022. STAR Protoc. 3:101174. [PubMed](#)
6. Loo Yau H, *et al.* 2021. Molecular Cell. 81(7):1469-1483.e8. [PubMed](#)

RRID

AB_2562827 (BioLegend Cat. No. 310939)

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	<ol style="list-style-type: none">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.
Gene ID	969

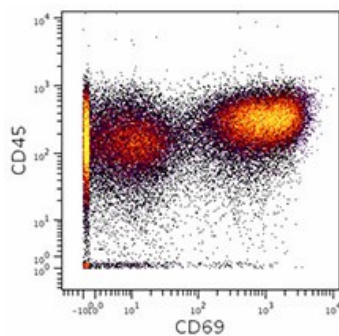
Related Protocols

[Cell Surface Flow Cytometry Staining Protocol](#)

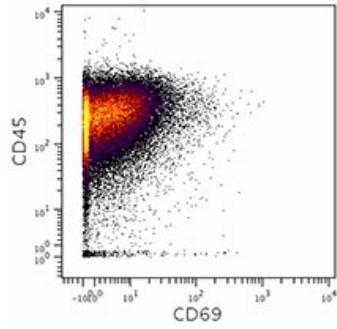
Other Formats

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



Human PBMCs were incubated for 6 hours in media alone (bottom) or with PMA and Ionomycin (top) in the presence of monensin and brefeldin A. Cells were then fixed, permeabilized, and stained with 154Sm-anti-CD45 (HI30) and 162Dy-anti-CD69 (FN50). Data provided by DVS Sciences.



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