Purified anti-mouse CD69 (Maxpar® Ready) Antibody

Catalog# / Size	104533 / 100 µg
Clone	H1.2F3
Regulatory Status	RUO
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

Verified 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 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	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]. This antibody has been characterized in the literature as containing a lambda (?) light chain.
Additional Product Notes	Maxpar® is a registered trademark of Standard BioTools Inc.

Application References

(PubMed link indicates BioLegend citation)

1. Yokoyama WM, *et al.* 1988. *J. Immunol.* 141:369. (IP)
2. Sobel ES, *et al.* 1993. *J. Immunol.* 150:673.
3. Karlhofer FM, *et al.* 1991. *J. Immunol.* 146:3662.
4. Zhou X, *et al.* 2005. *J. Biol. Chem.* 280:31240. (IHC)
5. Podd BS, *et al.* 2006. *J. Immunol.* 176:6532. (IHC)
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. Wei SC *et al.* 2017. Cell. 170(6):1120-1133 . PubMed
2. Wei SC, *et al.* 2019. Immunity. 50:1084. PubMed
3. Joseph R, *et al.* 2021. Br J Cancer. 125:176. PubMed
4. Rustenhoven J, *et al.* 2021. Cell. 184(4):1000-1016.e27. PubMed

RRID AB_2563760 (BioLegend Cat. No. 104533)

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

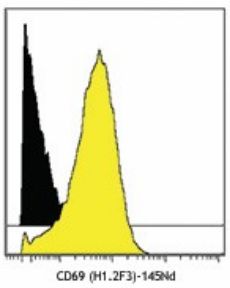
Related Protocols

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, Brilliant Violet 510™ 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, Spark Red™ 718 anti-mouse CD69

Product Data



C57BL/6 mouse splenocytes were incubated for 18 hours in media alone (black) or with PMA and Ionomycin (yellow). Cells were then fixed, permeabilized, and stained with 145Nd-anti-CD69 (H1.2F3). Data provided by DVS Sciences.

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