SONY

Product Data Sheet

PE/Cy7 anti-human CD69

Catalog # / Size: 2154560 / 100 tests
2154555 / 25 tests

Clone: FN50

Isotype: Mouse IgG1, κ

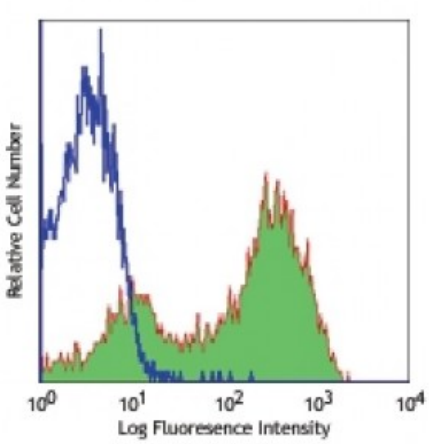
Reactivity: Human

Preparation: The antibody was purified by affinity chromatography, and conjugated with PE/Cy7 under optimal conditions. The solution is free of unconjugated PE/Cy7 and unconjugated antibody.

Formulation: Phosphate-buffered solution, pH 7.2, containing 0.09% sodium azide and 0.2% (w/v) BSA (origin USA).

Workshop Number: IV A91

Concentration: Lot-specific



PMA+ionomycin activated human peripheral blood lymphocytes stained with FN50 PE/Cy7

Applications:

Applications: Flow Cytometry

Recommended Usage: Each lot of this antibody is quality control tested by immunofluorescent staining with flow cytometric analysis. **Test size products are transitioning from 20 microL to 5 microL per test**. Please check your vial or your CoA to find the suggested use of this reagent per million cells in 100 microL staining volume or per 100 microL of whole blood. It is recommended that the reagent be titrated for optimal performance for each application.

Application Notes: Additional reported applications (for the relevant formats) include: immunohistochemical staining of acetone-fixed frozen tissue sections2 and immunofluorescence microscopy3.

Application References:

1. Knapp WB, *et al.* 1989. Leucocyte Typing IV. Oxford University Press. New York.
2. Sakkas LI, *et al.* 1998. *Clin. and Diag. Lab. Immunol.* 5:430. (IHC)
3. Kim JR, *et al.* 2005. *BMC Immunol.* 6:3. (IF)
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. Ophir MJ, *et al.* 2013. *J Cell Biol.* 203:1021. PubMed
9. Hall JM, *et al.* 2014. *Brin Behav Immun.* 36:156. PubMed
10. Ribot JC, *et al.* 2014. *J Immunol.* 192:2237. PubMed
11. Phadnis-Moghe AS, *et al.* 2015. *Toxicol Sci.* 144:39. PubMed

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.

Antigen References:

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.