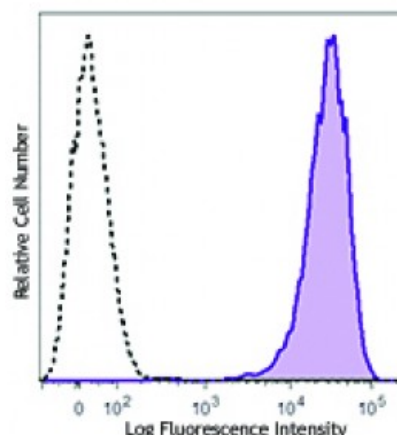


**PE/Dazzle™ 594 anti-human CD69**

<b>Catalog # / Size:</b>	2154705 / 25 tests 2154710 / 100 tests
<b>Clone:</b>	FN50
<b>Isotype:</b>	Mouse IgG1, $\kappa$
<b>Reactivity:</b>	Human
<b>Preparation:</b>	The antibody was purified by affinity chromatography and conjugated with PE/Dazzle™ 594 under optimal conditions. The solution is free of unconjugated PE/Dazzle™ 594 and unconjugated antibody.
<b>Formulation:</b>	Phosphate-buffered solution, pH 7.2, containing 0.09% sodium azide and 0.2% (w/v) BSA (origin USA).
<b>Workshop Number:</b>	IV A91
<b>Concentration:</b>	0.2



PMA + ionomycin-stimulated (6 hours) human peripheral blood lymphocytes were stained with CD69 (clone FN50) PE/Dazzle™ 594 (filled histogram) or mouse IgG1,  $\kappa$  PE/Dazzle™ 594 isotype control (open histogram).

**Applications:**

**Applications:** Flow Cytometry

**Recommended Usage:** Each lot of this antibody is quality control tested by immunofluorescent staining with flow cytometric analysis. For flow cytometric staining, the suggested use of this reagent is 5 microL per million cells or 5 microL per 100 microL of whole blood. It is recommended that the reagent be titrated for optimal performance for each application.

\* PE/Dazzle™ 594 has a maximum excitation of 566 nm and a maximum emission of 610 nm.

**Application Notes:** Additional reported applications (for the relevant formats) include: immunohistochemical staining of acetone-fixed frozen tissue sections<sup>2</sup> and immunofluorescence microscopy<sup>3</sup>.

- 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)

**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<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.

**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.