## Alexa Fluor® 700 anti-human CD69

**Catalog # / Size:** 2154610 / 100 μg

2154605 / 25 µg

Clone: FN50

**Isotype:** Mouse IgG1, κ

Reactivity: Human

**Preparation:** The antibody was purified by affinity

chromatography, and conjugated with

Alexa Fluor® 700 under optimal

conditions.

IV A91

**Formulation:** Phosphate-buffered solution, pH 7.2,

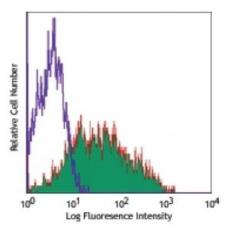
containing 0.09% sodium azide.

Workshop

Number:

r:

**Concentration:** 0.5



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

Alexa Fluor® 700

## **Applications:**

**Applications:** Flow Cytometry

Recommended

**Usage:** 

Each lot of this antibody is quality control tested by immunofluorescent staining with flow cytometric analysis. The suggested use of this reagent is  $\leq 0.5$  microg per  $10^6$  cells in 100 microL volume or 100 microL of whole blood. It is highly recommended that the reagent be titrated for optimal performance for each application.

\* 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.

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)

Verjans GM, et al. 2007. P. Natl. Acad. Sci. USA 104:3496.
Lu H, et al. 2009. Toxicol Sci. 112:363. (FC) PubMed

6. Thakral D, et al. 2008. J. Immunol. 180:7431. (FC) PubMed

6. Thakral D, *et al.* 2008. *J. Immunol.* 180:7431. (FC) <u>PubMed</u> 7. Yoshino N, *et al.* 2000. *Exp. Anim. (Tokyo)* 49:97. (FC)

8. Ries M, et al. 2013. J Leukoc Biol. 94:123. PubMed

O. Kies M, et al. 2013. J Leukot Diol. 94.123. FubMed

9. Havenith SH, 2014. Int Immunol. 26:183. 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<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.