

## **Product Data Sheet**

## APC anti-human/mouse CD49f

Catalog # / Size: 313615 / 25 tests

313616 / 100 tests

Clone: GoH3

**Isotype:** Rat IgG2a,  $\kappa$ 

Immunogen: Mouse mammary tumor cells

Reactivity: Human, Mouse, Cross-Reactivity: Baboon, Chimpanzee, Capuchin Monkey,

Cynomolgus, Rhesus, Horse (Equine), Cattle (Bovine, Cow), Sheep (Ovine), Swine (Pig, Porcine), Dog (Canine), Cat (Feline), Rabbit (Lapine)

Preparation: The antibody was purified by affinity chromatography, and conjugated with

APC under optimal conditions. The solution is free of unconjugated APC and

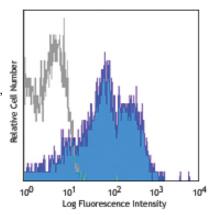
unconjugated antibody.

Formulation: Phosphate-buffered solution, pH 7.2, containing 0.09% sodium azide and

0.2% (w/v) BSA (origin USA).

Storage: The antibody solution should be stored undiluted at 4°C and protected from

prolonged exposure to light. Do not freeze.



Human peripheral blood lymphocytes were stained with anti-human/mouse CD49f (clone GOH3) APC (filled histogram) or rat IgG2a, κ APC isotype control (open histogram).

## **Applications:**

Applications: FC - Quality tested

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 µl to 5 µl per test. Please check your vial or your CoA to find the suggested use of this reagent per million cells in 100 µl staining volume or per 100 µl of whole blood. It is recommended that the reagent be titrated for optimal performance for each application. Read more at

www.biolegend.com/testsize regarding the test size change.

**Application Notes:** Additional reported applications (for the relevant formats) include: immunoprecipitation  $^{1,5}$ , in vitro and in vivo blocking of cell binding to laminin and blocking the function of integrin  $\alpha_6^{1,4}$ , and immunohistochemistry of acetone-fixed frozen

sections<sup>2,3,5</sup>. The GoH3 antibody has been reported to block laminin binding in vitro and to block integrin  $\alpha_6$  function

in vivo.

Application References: 1. Georas SN, et al. 1993. Blood 82:2872. (IP, Block)

2. Honda T, et al. 1995. J. Clin. Endocrinol. Metab. 80:2899. (IHC) 3. Sonnenberg A, et al. 1986. J. Histochem. Cytochem. 34:1037. (IHC)

Nakamura K, et al. 1997 Biochem. Biophys. Res. Commun. 235:524. (Block)
Sonnenberg A, et al. 1987 J. Biol. Chem. 262:10376. (IP, IHC)
Deregibus MC, et al. 2007. Blood doi:10.1182/blood-2007-03-078709.

7. Horwitz KB, et al. 2008. Proc Natl Acad Sci USA. 105:5774. PubMed 8. Nardella C, et al. 2009. Sci Signal. 2:55. PubMed 9. Xu T, et al. 2010. Mol Cancer Ther. 9:438. PubMed

10. Stepp MA, et al. 2007. J Cell Sci. 120:2851. PubMed 11. Jo M, et al. 2010. Cancer Res. 70:8948. PubMed

12. Yoshino N, et al. 2000. Exp. Anim. (Tokyo) 49:97. (FC)

13. Grange C, et al. 2011. Cancer Res. 71:5346. PubMed 14. Lai KP, et al. 2012. Mol Endocrinol. 26:52. PubMed

15. Oeztuerk-Winder F, et al. 2012. EMBO J. 31:3431. (FC) PubMed

**Description:** CD49f is a 120 kD integrin family member also known as VLA-6  $\alpha$  chain and  $\alpha_6$  integrin subunit. CD49f associates

with either integrin  $\beta_1$  (ČD29) or integrin  $\beta_4$  (CD104) to form receptors (VLA-6 or  $\alpha_6\beta_4$  complex) for laminin and kalinin. CD49f is expressed on platelets, monocytes, T cells, placental trophoblasts, epithelial and endothelial cells.

CD49f is involved in adhesion and can act as a co-stimulatory molecule for T cell activation and proliferation.

Antigen References: 1. Sonnenberg A, *et al.* 1990. *J. Cell Biol.* 110:2145. 2. Sonnenberg A, *et al.* 1990. *J. Cell. Sci.* 96:207. 3. Aumailley M, *et al.* 1990. *Exp. Cell Res.* 188:55.

4. Niessen CM, et al. 1994. Exp. Cell Res. 211:360.

**Related Products: Product** Application Clone APC Rat IgG2a, κ Isotype Ctrl RTK2758 FC, ICFC

FC, ICC, ICFC Cell Staining Buffer RBC Lysis Buffer (10X) FC, ICFC FC, ICC, ICFC

Human TruStain FcX™ (Fc Receptor Blocking Solution)



For research use only. Not for diagnostic use. Not for resale. BioLegend will not be held responsible for patent infringement or other violations that may occur with the use of our products.