

## **Product Data Sheet**

## Purified anti-human/mouse CD49f

Catalog # / Size: 313601 / 25 µg

313602 / 100 µg

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.

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

Concentration: 0.5 mg/ml

**Storage:** The antibody solution should be stored undiluted at 4°C.

## **Applications:**

Applications: FC - Quality tested

IF - Validated

IHC, IP - Reported in the literature

Recommended Usage: Each lot of this antibody is quality control tested by immunofluorescent

staining with flow cytometric analysis. For immunofluorescent staining, the suggested use of this reagent is ≤2.0 µg per million cells in 100 µl volume. It is recommended that the reagent be titrated for optimal performance for each

application.

 $\begin{array}{lll} \textbf{Application Notes:} & \text{Additional reported applications (for the relevant formats) include:} \\ & \text{immunoprecipitation}^{1,5}, \textit{in vitro} \text{ and } \textit{in vivo} \text{ blocking of cell binding to laminin} \\ & \text{and blocking the function of integrin } \alpha_6^{1,4}, \text{ and immunohistochemistry of acetone-fixed frozen sections}^{2,3,5}. \end{array}$ 

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)

 Honda T, et al. 1995. J. Clin. Endocrinol. Metab. 80:2899. (IHC)
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.

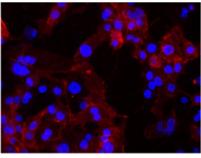
7. Horwitz KB, et al. 2008. Proc Natl Acad Sci USA. 105:5774. PubMed

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

100 103 10<sup>4</sup> 102 Log Fluoresence Intensity

Human peripheral blood lymphocytes stained with purified GoH3, followed by anti-rat IgGs FITC



MDA-MB-231 breast cancer cells were stained with anti-CD49f (clone GoH3) followed by DyLight™ 649 Goat anti-rat Ig secondary antibody (red), plus DAPI staining for nuclei (blue). Images were taken under 20x bin4 (Filter set: EX647/10x, Dichroic 665LP, EM 700/70x) at exposure 4s. Data provided by Er Liu and John Nolan, La Jolla Institute for Bioengineering.

**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  $\beta_1$  (CD29) 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** 

Clone Application FITC Goat anti-rat IgG (minimal x-reactivity) Poly4054 HRP Goat anti-rat IgG (minimal x-reactivity) Poly4054 ELISA, IF, IHC, WB PE Goat anti-rat IgĞ (minimal x-reactivity) Poly4054 FC, ICC, ICFC Cell Staining Buffer



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RBC Lysis Buffer (10X) Purified Rat IgG2a,  $\kappa$  Isotype Ctrl

RTK2758

FC, ICFC FC, ICC, IF, IHC, IP, WB



