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Product Data Sheet

Biotin anti-human/mouse CD49f

Catalog # / Size: 313603 / 25 µg
313604 / 100 µg

Clone: GoH3

Isotype: Rat IgG2a, κ

Immunogen: Mouse mammary tumor cells

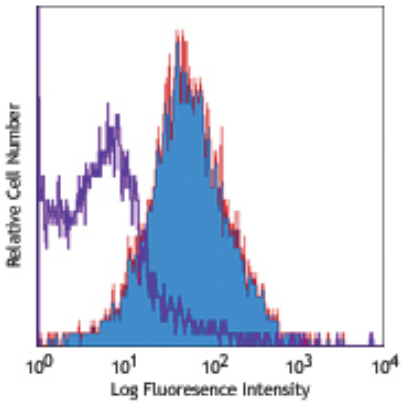
Reactivity: Human, Mouse, **Cross-Reactivity:** Baboon, Chimpanzee, Capuchin Monkey, Cynomolgus, Rhesus, Horse (Equine), Cattle (Bovine, Cow), Sheep (Ovine), Swine (Pig, Porcine), Dog (Canine), Cat (Feline), Rabbit (Lapine)

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

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. **Do not freeze.**



C57BL/6 mouse splenocytes stained with biotinylated GoH3, followed by Sav-PE

Applications:

Applications: FC - *Quality tested*

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 ≤0.5 µg per million cells in 100 µl volume. It is recommended that the reagent be titrated for optimal performance for each application.

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 α_6[1,4], and immunohistochemistry of acetone-fixed frozen sections[2,3,5]. The GoH3 antibody has been reported to block laminin binding *in vitro* and to block integrin α_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)
4. Nakamura K, *et al.* 1997 *Biochem. Biophys. Res. Commun.* 235:524. (Block)
5. Sonnenberg A, *et al.* 1987 *J. Biol. Chem.* 262:10376. (IP, IHC)
6. 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 α chain and α_6 integrin subunit. CD49f associates with either integrin β_1 (CD29) or integrin β_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
APC Streptavidin		FC, ICFC
HRP Streptavidin		ELISA, ELISPOT, IHC, WB
PE Streptavidin		FC, ICFC
Cell Staining Buffer		FC, ICC, ICFC
RBC Lysis Buffer (10X)		FC, ICFC
Biotin Rat IgG2a, κ Isotype Ctrl	RTK2758	FC, ICFC
Human TruStain FcX™ (Fc Receptor Blocking Solution)		FC, ICC, ICFC

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