

## Alexa Fluor® 488 anti-human/mouse CD49f

**Catalog # / Size:** 313607 / 25 tests  
313608 / 100 tests

**Clone:** GoH3

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

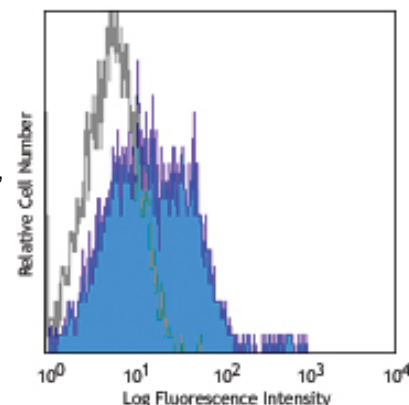
**Immunogen:** Mouse mammary tumor cells

**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 Alexa Fluor® 488 under optimal conditions. The solution is free of unconjugated Alexa Fluor® 488.

**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) Alexa Fluor® 488 (filled histogram) or rat IgG2a,  $\kappa$  Alexa Fluor® 488 isotype control (open histogram).

## Applications:

**Applications:** FC - Quality tested  
IHC, IF - 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 5  $\mu$ l per million cells or 5  $\mu$ l per 100  $\mu$ l of whole blood. It is recommended that the reagent be titrated for optimal performance for each application.

\* Alexa Fluor® 488 has a maximum emission of 519 nm when it is excited at 488 nm.

\*\* Alexa Fluor® is a registered trademark of Molecular Probes, Inc. Alexa Fluor® dye antibody conjugates are sold under license from Molecular Probes, Inc. for research use only, except for use in combination with microarrays and high content screening, and are covered by pending and issued patents.

**Application Notes:** Additional reported applications (for the relevant formats) include: immunoprecipitation<sup>1,5</sup>, *in vitro* and *in vivo* blocking of cell binding to laminin and blocking the function of integrin  $\alpha_6$ <sup>1,4</sup>, 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:**

- 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.
- Horwitz KB, *et al.* 2008. *Proc Natl Acad Sci USA.* 105:5774. PubMed
- Nardella C, *et al.* 2009. *Sci Signal.* 2:55. PubMed
- Xu T, *et al.* 2010. *Mol Cancer Ther.* 9:438. PubMed
- Stapp MA, *et al.* 2007. *J Cell Sci.* 120:2851. PubMed
- Jo M, *et al.* 2010. *Cancer Res.* 70:8948. PubMed
- Yoshino N, *et al.* 2000. *Exp. Anim. (Tokyo)* 49:97. (FC)
- Grange C, *et al.* 2011. *Cancer Res.* 71:5346. PubMed
- Lai KP, *et al.* 2012. *Mol Endocrinol.* 26:52. PubMed
- 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  $\beta_1$  (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:**

- Sonnenberg A, *et al.* 1990. *J. Cell Biol.* 110:2145.
- Sonnenberg A, *et al.* 1990. *J. Cell. Sci.* 96:207.
- Aumailley M, *et al.* 1990. *Exp. Cell Res.* 188:55.
- Niessen CM, *et al.* 1994. *Exp. Cell Res.* 211:360.

**Related Products:** Product  
Cell Staining Buffer

Clone

Application  
FC, ICC, ICFC



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.



\*These products may be covered by one or more Limited Use Label Licenses (see the BioLegend Catalog or our website, [www.biollegend.com/ordering#license](http://www.biollegend.com/ordering#license)). BioLegend products may not be transferred to third parties, resold, modified for resale, or used to manufacture commercial products, reverse engineer functionally similar materials, or to provide a service to third parties without written approval of BioLegend. By use of these products you accept the terms and conditions of all applicable Limited Use Label Licenses. Unless otherwise indicated, these products are for research use only and are not intended for human or animal diagnostic, therapeutic or commercial use.

RBC Lysis Buffer (10X)  
Alexa Fluor® 488 Rat IgG2a, κ Isotype Ctrl  
Human TruStain FcX™ (Fc Receptor Blocking Solution)

RTK2758

FC, ICFC  
FC, ICFC  
FC, ICC, ICFC



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.



\*These products may be covered by one or more Limited Use Label Licenses (see the BioLegend Catalog or our website, [www.biolegend.com/ordering#license](http://www.biolegend.com/ordering#license)). BioLegend products may not be transferred to third parties, resold, modified for resale, or used to manufacture commercial products, reverse engineer functionally similar materials, or to provide a service to third parties without written approval of BioLegend. By use of these products you accept the terms and conditions of all applicable Limited Use Label Licenses. Unless otherwise indicated, these products are for research use only and are not intended for human or animal diagnostic, therapeutic or commercial use.

BioLegend Inc., 9727 Pacific Heights Blvd, San Diego, CA 92121 [www.biolegend.com](http://www.biolegend.com)  
Toll-Free Phone: 1-877-Bio-Legend (246-5343) Phone: (858) 455-9588 Fax: (858) 455-9587