

## LEAF™ Purified anti-human/mouse CD49f

**Catalog # / Size:** 313613 / 50 µg  
313614 / 200 µg

**Clone:** GoH3

**Isotype:** Rat IgG2a, κ

**Immunogen:** Mouse mammary tumor cells

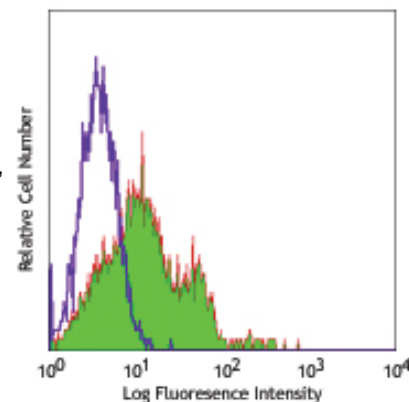
**Reactivity:** Human, Mouse, **Cross-Reactivity:** Baboon, Chimpanzee, Capuchin Monkey, Cynomolgus, Rhesus, Horse (Equine), Cattle (Bovine, Cow), Sheep (Ovine), Swine (Pig, Porcine), Dog (Canine), Cat (Feline), Rabbit (Lapine)

**Preparation:** The LEAF™ (Low Endotoxin, Azide-Free) antibody was purified by affinity chromatography.

**Formulation:** 0.2 µm filtered in phosphate-buffered solution, pH 7.2, containing no preservative. Endotoxin level is <0.1 EU/µg of the protein (<0.01 ng/µg of the protein) as determined by the LAL test.

**Concentration:** 1.0 mg/ml

**Storage:** The antibody solution should be stored undiluted at 4°C. This LEAF™ solution contains no preservative; handle under aseptic conditions.



Human peripheral blood lymphocytes stained with LEAF™ purified GoH3, followed by anti-rat IgG FITC

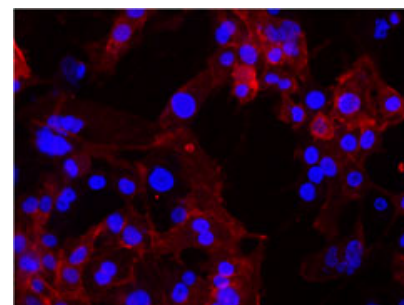
## Applications:

**Applications:** FC - Quality tested  
IF - Validated  
IHC, IP, Block - 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 ≤0.5 µg per million cells in 100 µl volume or 100 µl of whole blood. 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<sup>1,5</sup>, *in vitro* and *in vivo* blocking of cell binding to laminin and blocking the function of integrin α<sub>6</sub><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 α<sub>6</sub> 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



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 α chain and α<sub>6</sub> integrin subunit. CD49f associates with either integrin β<sub>1</sub> (CD29) or integrin β<sub>4</sub> (CD104) to form receptors (VLA-6 or α<sub>6</sub>β<sub>4</sub> 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

### Clone

### Application



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.

Cell Staining Buffer  
LEAF™ Purified Rat IgG2a, κ Isotype Ctrl

RTK2758

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



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