## **Technical Data Sheet**

# FITC Rat Anti-Human CD49f

## **Product Information**

Material Number: Alternate Name:

Size: Vol. per Test: **Clone:** Immunogen: **Isotype: Reactivity:** 

Workshop: **Storage Buffer:** 

## Description

The GoH3 monoclonal antibody specifically binds to CD49f which is also known as integrin α6 chain. CD49f is a ~150 kDa type I transmembrane glycoprotein that belongs to the integrin alpha chain family of extracellular matrix and cell adhesion receptors. The integrin  $\alpha \delta$  subunit associates with the integrin  $\beta 1$  chain (CD29) to form VLA-6 and with the integrin  $\beta 4$  chain (CD104) to form the integrin  $\alpha \delta \beta 4$ complex, also known as the laminin and kalinin receptor. CD49f is expressed mainly on T cells, monocytes, platelets, epithelial cells, endothelial cells, perineural cells, and trophoblasts of placenta. GoH3 recognizes an extracellular epitope of integrin α6 on human, mouse and bovine cells. GoH3 has been reported to block the binding of integrin α6 to laminin P1 and E8 fragments.

555735

ITA6 100 Tests

20 µl

GoH3

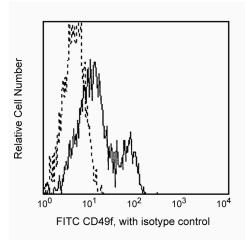
**IV P55** 

Mouse mammary tumor cells

Tested in Development: Mouse, Pig, Dog

Rat (SD) IgG2a, ĸ

QC Testing: Human



Flow cytometric analysis of CD49f expression on human peripheral blood lymphocytes. Human whole blood was stained with either FITC Rat IgG2a, κ Isotype Control (Cat. No. 555843; dashed line histogram) or FITC Rat Anti-Human CD49f (Cat. No. 555735/561893: solid line histogram). Erythrocytes were lysed with BD PharmLyse™ Lysing Buffer (Cat. No. 555899). Fluorescent histograms depicting CD49f (or Ig isotype) expression were derived from gated events with the side and forward light-scattering characteristics of viable lymphocytes. Flow cytometry was performed on a BD FACScan™ system.

ITGA6; IThe GoH3 monoclonal ntegrin alpha-6; Integrin α6 chain; VLA-6;

Aqueous buffered solution containing BSA and ≤0.09% sodium azide.

## **Preparation and Storage**

Store undiluted at 4°C and protected from prolonged exposure to light. Do not freeze. The monoclonal antibody was purified from tissue culture supernatant or ascites by affinity chromatography. The antibody was conjugated with FITC under optimum conditions, and unreacted FITC was removed.

## **Application Notes**

## Application

Flow cytometry

Routinely Tested

#### **Recommended Assay Procedure:**

BD™ CompBeads can be used as surrogates to assess fluorescence spillover (Compensation). When fluorochrome conjugated antibodies are bound to CompBeads, they have spectral properties very similar to cells. However, for some fluorochromes there can be small differences in spectral emissions compared to cells, resulting in spillover values that differ when compared to biological controls. It is strongly recommended that when using a reagent for the first time, users compare the spillover on cell and CompBead to ensure that BD Comp beads are appropriate for your specific cellular application.

## **BD Biosciences**

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## **Suggested Companion Products**

Catalog Number	Name	Size	Clone
555843	FITC Rat IgG2a, κ Isotype Control	100 Tests	R35-95
554656	Stain Buffer (FBS)	500 mL	(none)
554657	Stain Buffer (BSA)	500 mL	(none)
349202	BD FACS™ Lysing Solution	100 mL	(none)
555899	Lysing Buffer	100 mL	(none)
561893	FITC Rat Anti-Human CD49f	25 Tests	GoH3

## **Product Notices**

1. This reagent has been pre-diluted for use at the recommended Volume per Test. We typically use  $1 \times 10^{6}$  cells in a 100-µl experimental sample (a test).

- 2. An isotype control should be used at the same concentration as the antibody of interest.
- 3. Caution: Sodium azide yields highly toxic hydrazoic acid under acidic conditions. Dilute azide compounds in running water before discarding to avoid accumulation of potentially explosive deposits in plumbing.
- 4. Source of all serum proteins is from USDA inspected abattoirs located in the United States.
- 5. Species cross-reactivity detected in product development may not have been confirmed on every format and/or application.
- 6. For fluorochrome spectra and suitable instrument settings, please refer to our Multicolor Flow Cytometry web page at www.bdbiosciences.com/colors.
- 7. Please refer to http://regdocs.bd.com to access safety data sheets (SDS).
- 8. Please refer to www.bdbiosciences.com/us/s/resources for technical protocols.

### References

Aumailley M, Timpl R, Sonnenberg A. Antibody to integrin alpha 6 subunit specifically inhibits cell-binding to laminin fragment 8. *Exp Cell Res.* 1990; 188(1):55-60. (Biology)

Knapp W. W. Knapp .. et al., ed. Leucocyte typing IV : white cell differentiation antigens. Oxford New York: Oxford University Press; 1989:1-1182. (Clone-specific) Sonnenberg A, Daams H, Van der Valk MA, Hilkens J, Hilgers J. Development of mouse mammary gland: identification of stages in differentiation of luminal and myoepithelial cells using monoclonal antibodies and polyvalent antiserum against keratin. J Histochem Cytochem. 1986; 34(8):1037-1046. (Immunogen)