Technical Data Sheet

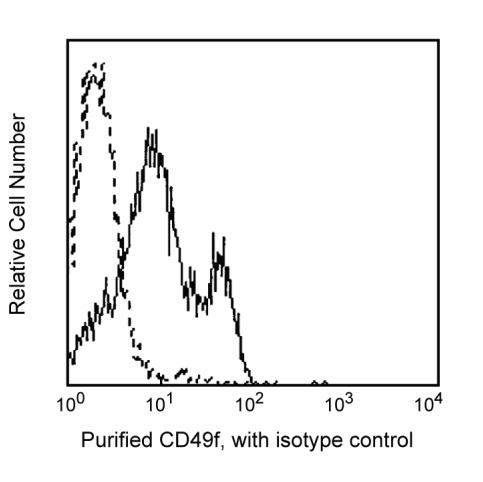
Purified Rat Anti-Human CD49f

Product Information

Material Number:	**555734**
Alternate Name:	ITGA6; IThe GoH3 monoclonal ntegrin alpha-6; Integrin α6 chain; VLA-6; ITA6
Size:	0.1 mg
Concentration:	0.5 mg/ml
Clone:	GoH3
Immunogen:	Mouse mammary tumor cells
Isotype:	Rat (SD) IgG2a, κ
Reactivity:	QC Testing: Human Tested in Development: Mouse, Pig, Dog
Workshop:	IV P55
Storage Buffer:	Aqueous buffered solution containing ≤0.09% sodium azide.

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 α6 subunit associates with the integrin β1 chain (CD29) to form VLA-6 and with the integrin β4 chain (CD104) to form the integrin α6β4 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.



Flow cytometric analysis of CD49f expression on human peripheral blood lymphocytes. *Human whole blood was stained with either Purified Rat IgG2a, κ Isotype Control (Cat. No. 555841; dashed line histogram) or Purified Rat Anti-Human CD49f (Cat. No. 555734; solid line histogram), followed by FITC Goat Anti-Rat Ig (Cat. No. 554016). 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.*

Preparation and Storage

Store undiluted at 4°C.

The monoclonal antibody was purified from tissue culture supernatant or ascites by affinity chromatography.

Application Notes

Application

Flow cytometry	Routinely Tested
Immunohistochemistry-frozen	Reported
Immunoprecipitation	Reported

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Suggested Companion Products

Catalog Number	Name	Size	Clone
555841	Purified Rat IgG2a, κ Isotype Control	0.1 mg	R35-95
554016	FITC Goat Anti-Rat Ig	0.5 mg	Polyclonal
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)

Product Notices

1. Since applications vary, each investigator should titrate the reagent to obtain optimal results.
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. Please refer to http://regdocs.bd.com to access safety data sheets (SDS).
5. Sodium azide is a reversible inhibitor of oxidative metabolism; therefore, antibody preparations containing this preservative agent must not be used in cell cultures nor injected into animals. Sodium azide may be removed by washing stained cells or plate-bound antibody or dialyzing soluble antibody in sodium azide-free buffer. Since endotoxin may also affect the results of functional studies, we recommend the NA/LE (No Azide/Low Endotoxin) antibody format, if available, for in vitro and in vivo use.
6. Species cross-reactivity detected in product development may not have been confirmed on every format and/or application.
7. 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. (Biology)

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)