Technical Data Sheet

Alexa Fluor® 647 Rat Anti-Human CD49f

Product Information

Material Number:562473Alternate Name:Integrin α6 chainSize:100 testsVol. per Test:5 μlClone:GoH3

Immunogen: Mouse mammary tumor cells

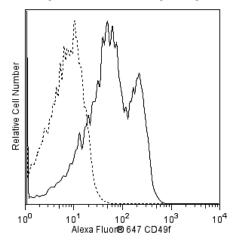
Isotype:Rat (SD) IgG2a, κ Reactivity:QC Testing: Human

Workshop: IV P55

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

Description

The GoH3 monoclonal antibody specifically binds to CD49f or integrin α 6 chain, a 150 kDa transmembrane protein, member of extracellular matrix and cell adhesion receptor family. α 6 associates with integrin β 1 chain (CD29) to form VLA-6 and with integrin β 4 chain (CD104) to form the α 6 β 4 complex, also known as the laminin and kalinin receptor. CD49f is expressed mainly on T cells, monocytes, platelets, epithelial and endothelial cells, perineural cells and trophoblasts of placenta. GoH3 recognizes an extracellular epitope of integrin α 6 on human, mouse and bovine cells. GoH3 has been reported to block the binding of integrin α 6 to laminin P1 and E8 fragments.



Flow cytometric analysis of CD49f expression on human peripheral blood lymphocytes. Whole blood was stained with Alexa Fluor® 647 Mouse Anti-Human CD49f antibody (Cat. No. 562473/562494; solid line histogram) or with an Alexa Fluor® 647 Rat IgG2a, κ Isotype Control (Cat. No. 557690, dashed line histogram). The erythrocytes were lysed with BD Pharm Lyse™ Lysing Buffer (Cat. No. 555899). The fluorescence histograms were derived from events with the forward and side light-scatter characteristics of viable lymphocytes. Flow cytometry was performed using a BD™ LSR II Flow Cytometer System.

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 to Alexa Fluor® 647 under optimum conditions, and unreacted Alexa Fluor® 647 was removed.

Application Notes

Application

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Flow cytometry	Routinely Tested	

Suggested Companion Products

Catalog Number	Name	Size	Clone
562494	Alexa Fluor® 647 Rat Anti-Human CD49f	25 tests	GoH3
557690	Alexa Fluor® 647 Rat IgG2a, κ Isotype Control	0.1 mg	R35-95
555899	Lysing Buffer	100 ml	(none)
554656	Stain Buffer (FBS)	500 ml	(none)

Product Notices

- This reagent has been pre-diluted for use at the recommended Volume per Test. We typically use 1 × 10⁶ 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.

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- 3. Source of all serum proteins is from USDA inspected abattoirs located in the United States.
- 4. The Alexa Fluor®, Pacific Blue™, and Cascade Blue® dye antibody conjugates in this product are sold under license from Molecular Probes, Inc. for research use only, excluding use in combination with microarrays, or as analyte specific reagents. The Alexa Fluor® dyes (except for Alexa Fluor® 430), Pacific Blue™ dye, and Cascade Blue® dye are covered by pending and issued patents.
- 5. Alexa Fluor® is a registered trademark of Molecular Probes, Inc., Eugene, OR.
- 6. Alexa Fluor® 647 fluorochrome emission is collected at the same instrument settings as for allophycocyanin (APC).
- 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.
- 8. For fluorochrome spectra and suitable instrument settings, please refer to our Multicolor Flow Cytometry web page at www.bdbiosciences.com/colors.
- 9. Please refer to www.bdbiosciences.com/pharmingen/protocols 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, Dorken B, Rieber EP, et al, ed. Leucocyte Typing IV. New York: Oxford University Press; 1989:1-1208. (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: Immunohistochemistry, Radioimmunoassay)

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