

Anti-Mouse CD49f Antibody, Clone GoH3, Biotin



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Antibodies

Rat monoclonal IgG2a antibody
against human, mouse, rhesus CD49f
(integrin $\alpha 6$), biotin-conjugated

Catalog #60037BT	100 μ g	0.5 mg/mL
#60037BT.1	25 μ g	0.5 mg/mL

Product Description

The GoH3 antibody reacts with CD49f (integrin $\alpha 6$), an ~150 kDa transmembrane glycoprotein that associates non-covalently with CD29 (integrin $\beta 1$) or CD104 (integrin $\beta 4$) to form the heterodimeric receptors VLA-6 and $\alpha 6\beta 4$, which bind the extracellular matrix protein laminin. CD49f is a disulfide-linked dimer comprising an ~120 kDa heavy chain and an ~30 kDa membrane-bound light chain. Splice variants exist, which affect the cytoplasmic domain of the protein. CD49f is expressed on the surface of T cells, monocytes, platelets, placental trophoblasts, epithelial cells, and endothelial cells. It is involved in cell adhesion and regulating signaling pathways involved in a variety of processes, including the activation and proliferation of T cells, and the differentiation and maintenance of stem cell pluripotency. CD49f is considered the most important marker for selecting mouse mammary stem and progenitor cells. The GoH3 antibody reacts with an extracellular epitope on CD49f and reportedly blocks integrin $\alpha 6$ function in vivo and binding of integrin $\alpha 6$ to laminin in vitro.

Target Antigen Name:	CD49f (Integrin $\alpha 6$)
Alternative Names:	$\alpha 6$ integrin, integrin $\alpha 6$, VLA-6 α chain
Gene ID:	16403/3655
Species Reactivity:	Human, Mouse, Rhesus, Cynomolgus, Baboon, Chimpanzee, Capuchin Monkey, Cat, Cow, Dog, Horse, Pig, Rabbit, Sheep
Host Species:	Rat (SD)
Clonality:	Monoclonal
Clone:	GoH3
Isotype:	IgG2a, kappa
Immunogen:	Mouse (BALB/c) mammary tumor cells
Conjugate:	Biotin

Applications

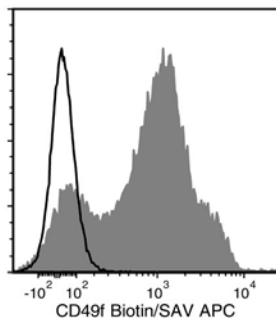
Verified:	FC
Reported:	FC, IHC

Abbreviations: CellSep: Cell separation; ChIP: Chromatin immunoprecipitation; FA: Functional assay; FACS: Fluorescence-activated cell sorting; FC: Flow cytometry; ICC: Immunocytochemistry; IF: Immunofluorescence microscopy; IHC: Immunohistochemistry; IP: Immunoprecipitation; RIA: Radioimmunoassay; WB: Western blotting

Properties

Formulation:	Phosphate-buffered solution, pH 7.2, containing 0.09% sodium azide
Purification:	The antibody was purified by affinity chromatography and conjugated with biotin under optimal conditions. The solution is free of unconjugated biotin.
Stability and Storage:	Product stable at 2 - 8°C when stored undiluted. Do not freeze. For product expiry date, please contact techsupport@stemcell.com .
Directions for Use:	For flow cytometry, the suggested use of this antibody is $\leq 0.5 \mu$ g per 1×10^6 cells in 100 μ L. It is recommended that the antibody be titrated for optimal performance for each application.

Data



Flow cytometry analysis of human peripheral blood mononuclear cells (PBMCs) labeled with Anti-Mouse CD49f Antibody, Clone GoH3, Biotin, followed by streptavidin (SAV) APC (filled histogram), or Rat IgG2a, kappa Isotype Control Antibody, Clone RTK2758, Biotin (Catalog #60076BT), followed by SAV APC (solid line histogram).

Related Products

For a complete list of antibodies, including other conjugates, sizes and clones, as well as related products available from STEMCELL Technologies, visit www.stemcell.com/antibodies or contact us at techsupport@stemcell.com.

References

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