ARG23087
anti-CD49f / Integrin alpha 6 antibody [NKI-GoH3]

Package: 100 µg
Store at: -20°C

Summary

Product Description	Rat Monoclonal antibody [NKI-GoH3] recognizes CD49f / Integrin alpha 6 Rat anti Human CD49f antibody, clone NKI-GoH3 recognizes CD49f, also known as the VLA-6 alpha chain, CD49f is a 1107 amino acid ~120 kDa cell surface glycoprotein that forms distinct complexes with CD29 (VLA beta-chain), resulting in the VLA-6 (alpha-6 beta-1) complex, expressed on human platelets, or with the beta-4 integrin resulting in the alpha-6 beta-4 complex expressed on various human epithelial cells. Rat anti Human CD49f antibody, clone NKI-GoH3 reacts with platelets, megakaryocytes, T lymphocytes and common Acute Lymphoblastic Leukaemia cells (alpha-6 beta-1). In immunohistology the monoclonal antibody reacts with epithelial cells of a variety of tissues, peripheral nerves, microvascular endothelial cells, placenta cyto- and syncytotrophoblasts.VLA-6 is an important mediator of cell binding to laminin. Rat anti Human CD49f antibody, clone NKI-GoH3 blocks the binding of cells to the E8 fragment of laminin (Sonnenberg et al. 1998).
Tested Reactivity	Hu, Ms, Dog, Pig, Sheep
Tested Application	FACS, ICC/IF, IHC-Fr, IP
Host	Rat
Clonality	Monoclonal
Clone	NKI-GoH3
Isotype	IgG2a
Target Name	CD49f / Integrin alpha 6
Species	Human
Immunogen	BALB/c Mouse mammary tumour cells.
Conjugation	Un-conjugated
Alternate Names	CD49 antigen-like family member F; ITGA6B; Alpha6p; VLA-6; CD antigen CD49f; CD49f; Integrin alpha-6

Application Instructions

Application table

Application	Dilution
FACS	Neat
ICC/IF	Assay-dependent
IHC-Fr	Assay-dependent
IP	Assay-dependent

Application Note: FACS: Use 10 µl of the suggested working dilution to label 106 platelets in 100 µl.
* The dilutions indicate recommended starting dilutions and the optimal dilutions or concentrations should be determined by the scientist.

Properties

Form	Liquid

Purification	Purification with Protein G.
Buffer	PBS and 0.09% Sodium azide
Preservative	0.09% Sodium azide
Concentration	1 mg/ml
Storage instruction	For continuous use, store undiluted antibody at 2-8°C for up to a week. For long-term storage, aliquot and store at -20°C or below. Storage in frost free freezers is not recommended. Avoid repeated freeze/thaw cycles. Suggest spin the vial prior to opening. The antibody solution should be gently mixed before use.
Note	For laboratory research only, not for drug, diagnostic or other use.

Bioinformation

Gene Symbol	ITGA6
Gene Full Name	integrin, alpha 6
Background	The ITGA6 protein product is the integrin alpha chain alpha 6. Integrins are integral cell-surface proteins composed of an alpha chain and a beta chain. A given chain may combine with multiple partners resulting in different integrins. For example, alpha 6 may combine with beta 4 in the integrin referred to as TSP180, or with beta 1 in the integrin VLA-6. Integrins are known to participate in cell adhesion as well as cell-surface mediated signalling. Two transcript variants encoding different isoforms have been found for this gene. [provided by RefSeq, Jul 2008]
Function	Integrin alpha-6/beta-1 is a receptor for laminin on platelets. Integrin alpha-6/beta-4 is a receptor for laminin in epithelial cells and it plays a critical structural role in the hemidesmosome. [UniProt]
Calculated Mw	127 kDa
PTM	Isoforms containing segment A, but not segment B, are the major targets for PMA-induced phosphorylation. Phosphorylation occurs on 'Ser-1103' of isoform alpha-6X1X2A. Phosphorylation is not required for the induction of integrin alpha-6A/beta-1 high affinity but may reduce the affinity for ligand. In invasive prostate cancer ITGA6 undergoes PLAU-mediated cleavage at residues Arg-634-635-Arg in a time-dependent manner enhancing cell invasion and migration in vitro. Palmitoylation by DHHC3 enhances stability and cell surface expression.