

## Datasheet for ABIN1042463

# anti-CD51 antibody





#### Overview

Quantity:	0.1 mg
Target:	CD51 (ITGAV)
Reactivity:	Human
Host:	Mouse
Clonality:	Monoclonal
Conjugate:	This CD51 antibody is un-conjugated
Application:	Flow Cytometry (FACS), ELISA, Immunoprecipitation (IP), Immunohistochemistry (Frozen Sections) (IHC (fro))

### **Product Details**

Clone:	NKI-M7 (former AMF7)
Isotype:	lgG1
Specificity:	T-lymphocyte clones NKI-M7 detect a melanoma-associated proteoglycan (MW greater than 450-250 kDa) and a molecular complex, which under reducing conditions consists of 4 compounds of 120, 95, 29 and 25 kDa respectively. NKI-M7 reacts with cultured melanomas melanomas in frozen sections. The antigen detected by NKI-M7 is strongly associated with the adhesion and cytoplasmic spreading of melanoma cells to plastic surfaces and monolayers of
	vascular endothelial cells. NKI-M7 blocks fibronectin-induced chemotaxic motility and chemokinesis of melanoma cells. In addition to their membrane localization, the antigens detected by NKI-M7 are abundant in extracellular adhesion plaques deposited by cultured melanoma cells. NKI-M7 stains primary tumors heterogeneously, whereas metastases are homogeneously stained.

Product Details	
Characteristics:	CD markers,Cell adhesion
Purification:	Purified
Target Details	
Target:	CD51 (ITGAV)
Alternative Name:	vitronectin receptor CD51 (ITGAV Products)
Background:	CD51 (Cluster of Differentiation 51), known as vitronectin receptor alpha chain, or integrin alphaV is a type I integral membrane glycoprotein. CD51 forms a heterodimer with integrin beta1 (CD29), beta3 (CD61), beta5, beta6, or beta8. CD51 contains two disulfide-linked subunits of 125 kD and 24 kD. Many extracellular matrix proteins with RGD-motifs are CD51 ligands. In association with its beta chains, CD51 binds vitronectin, von Willebrand factor, fibronectin, thrombospondin, osteopontin, fibrinogen, and laminin. CD51, as an adhesion molecule, plays important roles in leukocytes homing and rolling, mediates bone absorption and angiogenesis. CD51 is expressed on endothelial cells, fibroblasts, macrophages, platelets, osteoclasts, neuroblastoma, melanoma, and hepatoma cells.
Pathways:	Cell-Cell Junction Organization, Signaling Events mediated by VEGFR1 and VEGFR2, Growth Factor Binding, Integrin Complex
Application Details	
Application Notes:	NKI-M7 is useful for ELISA, immunoprecipitation, flow cytometry and immunohistochemsitry on frozen sections. Optimal antibody dilution should be determined by titration.
Comment:	NKI-M7 is a mouse monoclonal IgG2a antibody derived by fusion of SP2/0 mouse myeloma cells with spleen cells from a BALB/c mouse immunized with cultured melanoma cells derived from a human melanoma metastasis.
Restrictions:	For Research Use only
Handling	
Buffer:	PBS containing 0.09% sodium azide.
Preservative:	Sodium azide
Precaution of Use:	This product contains sodium azide: a POISONOUS AND HAZARDOUS SUBSTANCE which

should be handled by trained staff only.

Handling	
Storage:	4°C

#### **Publications**

Product cited in:

Atanes, Gómez, Aspe, de Toro, Graña, Sánchez, Galdo: "[Erythema nodosum: a study of 160 cases]." in: **Medicina clínica**, Vol. 96, Issue 5, pp. 169-72, (1991) (PubMed).

Quinn, Athanasou, McGee: "Extracellular matrix receptor and platelet antigens on osteoclasts and foreign body giant cells." in: **Histochemistry**, Vol. 96, Issue 2, pp. 169-76, (1991) (PubMed).

de Vries, Keizer, te Velde, Voordouw, Ruiter, Rümke, Spits, Figdor: "Characterization of melanoma-associated surface antigens involved in the adhesion and motility of human melanoma cells." in: **International journal of cancer. Journal international du cancer**, Vol. 38, Issue 4, pp. 465-73, (1986) (PubMed).