

## Datasheet for ABIN967498

# anti-CD56 antibody





#### Overview

Quantity:	0.1 mg
Target:	CD56 (NCAM1)
Reactivity:	Human, Mouse, Rat
Host:	Rat
Clonality:	Monoclonal
Conjugate:	This CD56 antibody is un-conjugated
Application:	Western Blotting (WB), Immunohistochemistry (Frozen Sections) (IHC (fro))
Product Details	

Brand:	BD Pharmingen™
Immunogen:	Mouse membrane fractions
Clone:	12F8
Isotype:	IgM
Cross-Reactivity:	Human, Rat (Rattus)
Characteristics:	<ol> <li>Since applications vary, each investigator should titrate the reagent to obtain optimal results.</li> <li>Please refer to us for technical protocols.</li> <li>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.</li> </ol>
Purification:	The monoclonal antibody was purified from tissue culture supernatant or ascites by affinity chromatography.

### **Target Details**

l arget Details		
Target:	CD56 (NCAM1)	
Alternative Name:	CD56 (N-CAM) (NCAM1 Products)	
Background:	Cell adhesion molecules are present on the surface of most cells (CAMs). Neural CAMs play a	
	key role in the development of the embryonic nervous system. Expression of neural CAMs	
	provides neurons with a means of attaching to and interacting with other cells and the	
	extracellular matrix. The cell surface adhesion molecule N-CAM is important in mediating initial	
	axon outgrowth and cell migration during development. In the mature nervous system, N-CAM	
	is important in regulating cell interactions. Additionally, the expression of several CAMs,	
	including N-CAM is altered following injury to the peripheral nervous system. Antibodies	
	recognizing specific CAM forms have been instrumental in defining their roles in the nervous	
	system. Monoclonal 12F8 specifically recognizes the polysialic acid on N-CAM. The embryonic	
	form of N-CAM is highly polysialylated during development which is later replaced by the	
	lesspolysialic acid (PSA)-laden mature forms of N-CAM. Clone 12F8 recognizes the polysialic	
	acid on N-CAM.2 It recognizes all species tested, from fish through human. 12F8 reacts with a	
	neuraminidase-sensitive epitope of N-CAM. The epitope recognized by 12F8 is more highly	
	expressed in the embryonic than in the adult brain. As such, 12F8 is useful for distinguishing	
	embryonic forms of N-CAM from adult forms which have decreased polysialic acid expression.	
	In addition to brain, 12F8 reacts with some non-neuronal cells. However it does not appear to	
	recognize mouse NK cells. Mouse membrane fractions were used as immunogen.	
	Synonyms: N-CAM	
Molecular Weight:	90-200 kDa	
Application Details		
Application Notes:	In western blot analysis, clone 12F8 recognizes N-CAM as a broad band ranging from 90 kDa to	
	more than 200 kDa, depending on forms present. Mouse embryonic brain is suggested as a	
	positive control.	
Restrictions:	For Research Use only	
Handling		
Format:	Liquid	
Concentration:	0.5 mg/mL	
Buffer:	Aqueous buffered solution containing ≤0.09 % sodium azide.	

#### Handling

Preservative:	Sodium azide
Precaution of Use:	This product contains Sodium azide: a POISONOUS AND HAZARDOUS SUBSTANCE which should be handled by trained staff only.
Storage:	4 °C
Storage Comment:	Store undiluted at 4°C.

#### **Publications**

#### Product cited in:

Hankin, Lagenaur: "Cell adhesion molecules in the early developing mouse retina: retinal neurons show preferential outgrowth in vitro on L1 but not N-CAM." in: **Journal of neurobiology**, Vol. 25, Issue 5, pp. 472-87, (1994) (PubMed).

Miller, Styren, Lagenaur, DeKosky: "Embryonic neural cell adhesion molecule (N-CAM) is elevated in the denervated rat dentate gyrus." in: **The Journal of neuroscience : the official journal of the Society for Neuroscience**, Vol. 14, Issue 7, pp. 4217-25, (1994) (PubMed).

Miller, Chung, Lagenaur, DeKosky: "Regional distribution of neural cell adhesion molecule (N-CAM) and L1 in human and rodent hippocampus." in: **The Journal of comparative neurology**, Vol. 327, Issue 3, pp. 341-9, (1993) (PubMed).

Walsh, Doherty: "Factors regulating the expression and function of calcium-independent cell adhesion molecules." in: **Current opinion in cell biology**, Vol. 5, Issue 5, pp. 791-6, (1993) (PubMed).

Chung, Lagenaur, Yan, Lund: "Developmental expression of neural cell adhesion molecules in the mouse neocortex and olfactory bulb." in: **The Journal of comparative neurology**, Vol. 314, Issue 2, pp. 290-305, (1992) (PubMed).

There are more publications referencing this product on: Product page