

#### **NrCAM Antibody**

NrCAM Antibody, Clone S364-51 Catalog # ASM10294

### **Specification**

## **NrCAM Antibody - Product Information**

Application
Primary Accession
Other Accession

Host Isotype Reactivity

Clonality **Description** 

Mouse Anti-Mouse NrCAM Monoclonal IgG2a

Target/Specificity

Detects ~160kDa.

#### **Other Names**

Neuronal cell adhesion molecule Antibody, Bravo Antibody, hBravo Antibody, KIAA0343 Antibody, MGC138845 Antibody, MGC138846 Antibody, Neuronal surface protein Bravo Antibody, Ng CAM related Antibody, Ng-CAM-related Antibody, NgCAM related cell adhesion molecule Antibody, NgCAM-related cell adhesion molecule Antibody, Nr CAM Antibody, Nr-CAM Antibody

ICC/IF, WB

**Monoclonal** 

NP 001139503.1

Human, Mouse, Rat

O810U4

Mouse

lqG2a

## Immunogen

Fusion protein amino acids 30-845 (extracellular domain) of mouse NrCAM. Rat: 96% identity (795/822 amino acids identical). Human: 91% identity (753/822 amino acids identical)  $\sim$ 50% identity with Neurofascin.

#### **Purification**

Protein G Purified

Storage -20°C

**Storage Buffer** 

PBS pH 7.4, 50% glycerol, 0.1% sodium azide

Shipping Temperature

Blue Ice or 4°C

**Certificate of Analysis** 

 $1 \mu g/ml$  of SMC-462 was sufficient for detection of NrCAM in 20  $\mu g$  of rat brain lysate by colorimetric immunoblot analysis using Goat anti-mouse IgG:HRP as the secondary antibody.

**Cellular Localization** 

Cell Membrane

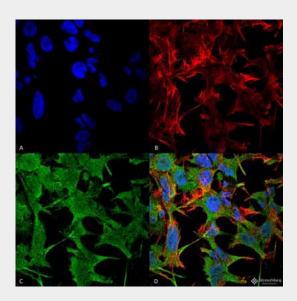
# **NrCAM Antibody - Protocols**

Provided below are standard protocols that you may find useful for product applications.

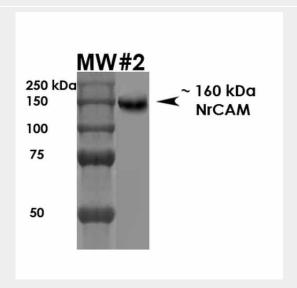


- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- <u>Immunoprecipitation</u>
- Flow Cytomety
- Cell Culture

## **NrCAM Antibody - Images**

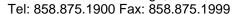


Immunocytochemistry/Immunofluorescence analysis using Mouse Anti-NrCAM Monoclonal Antibody, Clone S364-51 (ASM10294). Tissue: Neuroblastoma cell line (SK-N-BE). Species: Human. Fixation: 4% Formaldehyde for 15 min at RT. Primary Antibody: Mouse Anti-NrCAM Monoclonal Antibody (ASM10294) at 1:100 for 60 min at RT. Secondary Antibody: Goat Anti-Mouse ATTO 488 at 1:100 for 60 min at RT. Counterstain: Phalloidin Texas Red F-Actin stain; DAPI (blue) nuclear stain at 1:1000, 1:5000 for 60min RT, 5min RT. Localization: Cell Membrane. Magnification: 60X. (A) DAPI (blue) nuclear stain (B) Phalloidin Texas Red F-Actin stain (C) NrCAM Antibody (D) Composite.



Western Blot analysis of Rat Brain Membrane showing detection of ~160 kDa NrCam protein







using Mouse Anti-NrCam Monoclonal Antibody, Clone S364-51 (ASM10294). Load: 10 µg. Primary Antibody: Mouse Anti-NrCam Monoclonal Antibody (ASM10294) at 1:1000 for 1 hour at RT. Secondary Antibody: Goat Anti-Mouse HRP at 1:200 for 1 hour at RT. Predicted/Observed Size: ~160 kDa.

# NrCAM Antibody - Background

Neuronal cell adhesion molecule (NrCAM) is a cell surface protein of the immunoglobulin (Ig) superfamily, NrCAM (also known as Brayo) contains six Iq domains, five fibronectin repeats, a transmembrane region and an intracellular domain. NrCAM is expressed in brain, spinal cord, peripheral nervous system and pancreas. In the spinal cord, NrCAM acts as a ligand for axonin-1 to guide commissural axons across the floor plate. NrCAM also acts as a ligand for F3 to control actin-dependent growth cone motility. NrCAM interacts with neurofascin and may facilitate the clustering of the cystoskeletal protein ankyrin G and the voltage-dependent sodium channel proteins at the node of Ranvier. NrCAM expression may play a role in the severity of certain types of tumors. NrCAM is overexpressed in high-grade astrocytomas, gliomas and glioblastoma tumor tissues.

In the pancreas, NrCAM expression is upregulated in intraductal hyperplasia. Antisense NrCAM reduces the tumorigenic properties of human glioblastoma cells in vitro and slowed tumor growth in vivo. The gene encoding human NrCAM maps to chromosome 7q31.1-q31.2.