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Neuroligin 1 Antibody
Neuroligin 1 Antibody, Clone S97A-31
Catalog # ASM10295

Specification

Neuroligin 1 Antibody - Product Information

Application	ICC/IF, WB
Primary Accession	O62765
Other Accession	NP_446320.1.
Host	Mouse
Isotype	IgG1
Reactivity	Human, Mouse, Rat
Clonality	Monoclonal

Description
Mouse Anti-Rat Neuroligin 1 Monoclonal IgG1

Target/Specificity
Detects ~120kDa. Does not cross-react with other Neuroligins.

Other Names
NLG 1 Antibody, KIAA1070 Antibody, MGC45115 Antibody, Neuroligin-1 Antibody, NL1 Antibody, NLG1 Antibody, Nlgn1 Antibody

Immunogen
Fusion protein amino acids 718-843 (cytoplasmic C-terminus) of rat Neuroligin-1. Mouse: 99% identity (125/126 amino acids identical). Human: 99% identity (125/126 amino acids identical) >40% identity with Neuroligin-2 and -3.

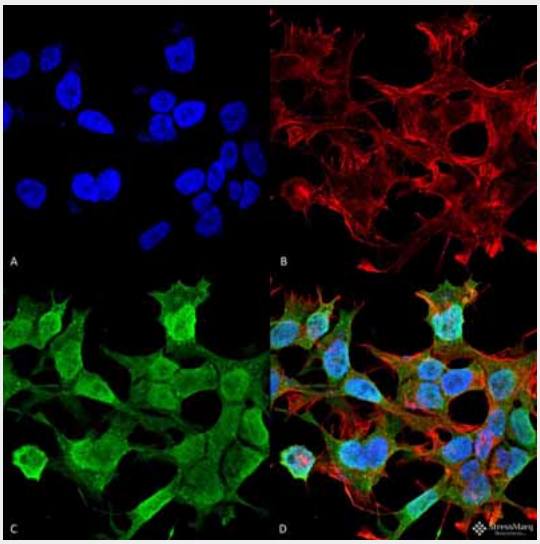
Purification
Protein G Purified

Storage	-20ºC

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

Shipping Temperature	Blue Ice or 4ºC

Certificate of Analysis
2 µg/ml of SMC-463 was sufficient for detection of Neuroligin-1 in 20 µg of rat brain lysate by colorimetric immunoblot analysis using Goat anti-mouse IgG:HRP as the secondary antibody.



Immunocytochemistry/Immunofluorescence analysis using Mouse Anti-Neuroligin 1 Monoclonal Antibody, Clone S97A-31 (ASM10295). Tissue: Neuroblastoma cell line (SK-N-BE). Species: Human. Fixation: 4% Formaldehyde for 15 min at RT. Primary Antibody: Mouse Anti-Neuroligin 1 Monoclonal Antibody (ASM10295) 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, Nucleus. Magnification: 60X. (A) DAPI (blue) nuclear stain (B) Phalloidin Texas Red F-Actin stain (C) Neuroligin 1 Antibody (D) Composite.

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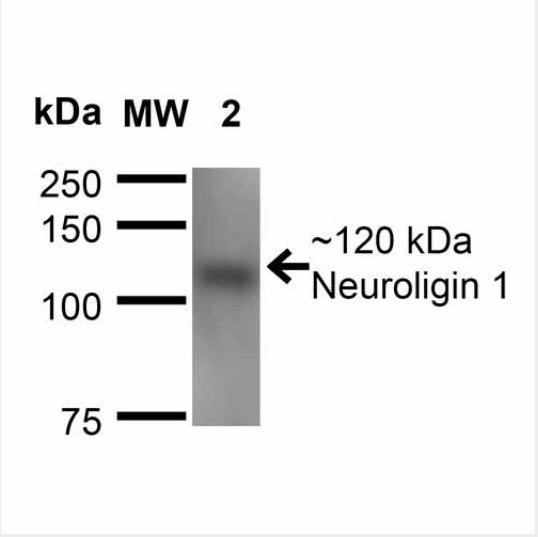
Cellular Localization
Cell Membrane | Cell Junction | Synapse | Postsynaptic Cell Membrane | Postsynaptic Density

Neuroligin 1 Antibody - Protocols

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

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture



Western Blot analysis of Mouse Brain Membrane showing detection of ~120 kDa Neuroligin 1 protein using Mouse Anti-Neuroligin 1 Monoclonal Antibody, Clone S97A-31 (ASM10295). Lane 1: Molecular Weight Ladder. Lane 2: Mouse Brain Membrane. Load: 15 µg. Block: 2% BSA and 2% Skim Milk in 1X TBST. Primary Antibody: Mouse Anti-Neuroligin 1 Monoclonal Antibody (ASM10295) at 1:200 for 16 hours at 4°C. Secondary Antibody: Goat Anti-Mouse IgG: HRP at 1:1000 for 1 hour RT. Color Development: ECL solution for 6 min in RT. Predicted/Observed Size: ~120 kDa.

Neuroligin 1 Antibody - Background

Neuroligin-1 is a neuronal cell surface protein belonging to the type-B carboxylesterase/lipase family. It is a necessary component in the maturation of excitatory synapses for their normal, functional development, and is necessary to the regulation of synaptic plasticity and the development of long-term memory within the adult amygdala in mammals. It is believed to participate in cell-cell-interaction through the assembly of intracellular junction by the binding of beta-neurexins, and may also be a factor in the maintenance and assembly of synaptic junctions. It is also thought to have involvement in excitatory synaptic specification. Within brain tissue, Neuroligin-1 is primarily observed in neurons and spinal cord.