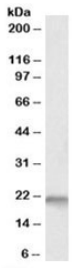
NSG1 Antibody / Neuron Specific Gene Family Member 1 Antibody (R33825)

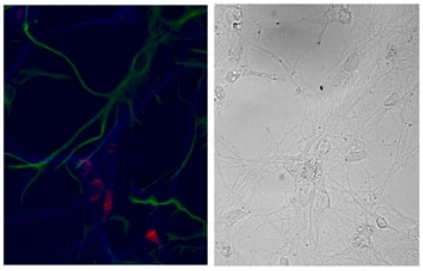
Catalog No.	Formulation	Size
R33825-100UG	0.5 mg/ml in 1X TBS, pH7.3, with 0.5% BSA (US sourced) and 0.02% sodium azide	100 ug

Bulk quote request

Availability	1-3 business days
Species Reactivity	Human, Mouse, Rat
Format	Antigen affinity purified
Host	Goat
Clonality	Polyclonal (goat origin)
Isotype	Goat Ig
Purity	Antigen affinity
Gene ID	27065
Applications	Western blot: 0.1-0.3ug/ml Immunocytochemistry: 1-5ug/ml ELISA (peptide) LOD: 1:128000
Limitations	This NSG1 Antibody / Neuron Specific Gene Family Member 1 Antibody is available for research use only.



NSG1 Antibody Fetal Mouse Brain WB. Western blot analysis was performed on fetal mouse brain lysate using NSG1 Antibody at 0.1 ug/ml. A specific immunoreactive band is detected at approximately 21 kDa, consistent with the predicted molecular weight of Neuron Specific Gene Family Member 1 (NSG1). The blot demonstrates reliable detection of endogenous NSG1 in developing neural tissue, supporting its known expression during neuronal development and endosomal trafficking. These results demonstrate that this Neuron Specific Gene Family Member 1 Antibody is suitable for Western blot detection of endogenous NSG1 in fetal mouse brain lysates.



NSG1 Antibody Primary Rat Hippocampal Neuron ICC. Immunocytochemistry was performed on primary DIV9 cultures derived from embryonic day 18 rat hippocampus using NSG1 Antibody at 1 ug/ml. NSG1 was detected with an Alexa Fluor 568-conjugated secondary antibody (red), while neurons were identified with MAP2 (blue) and glial cells with GFAP (green). The corresponding phase-contrast image is shown at right. NSG1 immunoreactivity is localized within MAP2-positive neurons and is absent from GFAP-positive glial cells, consistent with the neuron-specific expression of Neuron Specific Gene Family Member 1. These results demonstrate that this Neuron Specific Gene Family Member 1 Antibody is suitable for immunocytochemical detection of endogenous NSG1 in primary rat hippocampal neurons.

Description

NSG1 Antibody / Neuron Specific Gene Family Member 1 Antibody recognizes NSG1, also known as NEEP21, a neuron-enriched membrane protein that regulates endosomal trafficking and receptor recycling within the central nervous system. NSG1 localizes predominantly to early and recycling endosomes, where it directs membrane proteins through recycling pathways rather than lysosomal degradation. This trafficking function is essential for maintaining neuronal polarity, receptor availability, and efficient intracellular transport during neuronal development and synaptic activity. NSJ Bioreagents supplies NSG1 Antibody / Neuron Specific Gene Family Member 1 Antibody for reliable detection of this specialized neuronal trafficking protein in a wide variety of research applications.

Neuron Specific Gene Family Member 1 is highly expressed in developing and mature neurons, where it participates in the intracellular sorting of membrane proteins involved in synaptic signaling and neurite extension. By regulating receptor recycling and endosomal maturation, NSG1 contributes to dendritic growth, axonal transport, and activity-dependent membrane remodeling. Proper NSG1 function helps preserve surface receptor expression while supporting dynamic changes in neuronal connectivity. Consequently, NSG1 Antibody / Neuron Specific Gene Family Member 1 Antibody is widely used to investigate endosomal biology, neuronal membrane trafficking, receptor recycling, and nervous system development.

Disruption of NSG1-mediated trafficking has been associated with abnormal neuronal differentiation, impaired synaptic function, and altered intracellular transport pathways. Because defects in endosomal recycling contribute to numerous neurological and neurodegenerative disorders, NSG1 has become an important research target for understanding neuronal protein sorting and membrane homeostasis. Investigators also study Neuron Specific Gene Family Member 1 to define the molecular mechanisms governing receptor trafficking, synaptic plasticity, and maintenance of healthy neural circuits.

An NSG1 Antibody / Neuron Specific Gene Family Member 1 Antibody is a valuable reagent for investigating neuronal endosomal trafficking, receptor recycling, membrane transport, and nervous system development. By enabling reliable detection of Neuron Specific Gene Family Member 1, an NSG1 Antibody / Neuron Specific Gene Family Member 1 Antibody supports research into synaptic biology, neurodegeneration, intracellular protein sorting, and the molecular pathways that regulate endosomal recycling and neuronal homeostasis.

For a broader overview of this neuronal trafficking protein and additional validated reagents, visit our NEEP21 Antibody / Endosomal Recycling Protein Antibody page.

Application Notes

Optimal dilution of the NSG1 Antibody / Neuron Specific Gene Family Member 1 Antibody should be determined by the researcher.

Immunogen

Amino acids EKGTKQPLLEDGFD were used as the immunogen for this NSG1 antibody.

Storage

Aliquot and store the NSG1 antibody at -20oC.

Alternate Names

NEEP21 antibody, Neuron Specific Gene 1 antibody, Endosomal Protein NEEP21 antibody, Neuronal Vesicle Trafficking Protein antibody, Brain Specific Endosomal Protein antibody, Endosomal Recycling Protein antibody

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