

Rabbit Anti-NEP1-40 antibody

SL10509R

Product Name	NEP1-40
Chinese Name	Nogo-66(1-40)抗体
Alias	Nogo extra cellular peptide residues 1-40; Nogo-66(1-40); Nogo-66(1-40) antagonist peptide; Nogo A; reticulon-4 isoform D; ASY; Foccen; Human NogoA; KIAA0886; My043 protein; Nbla00271; Nbla10545; Neurite growth inhibitor 220; Neurite Outgrowth Inhibitor; Neuroendocrine specific protein; Neuroendocrine specific protein C homolog; NI220/250; Nogo A; NOGO; Nogo protein; NogoA; NSP; NSP CL; Reticulon 4; Reticulon 5; Reticulon4; Reticulon5; RTN 4; RTN 4A; RTN X; RTN xL; RTN4 A; RTN4; RTN4 B1; RTN4 B2; RTN4 C; RTN4 protein; RTN4_HUMAN; Reticulon-4; Neuroendocrine-specific protein.
Research Area	Cell biology Neurobiology Signal transduction
Immunogen Species	Rabbit
Clonality	Polyclonal
React Species	Human, (predicted: Mouse, Rat, Chicken, Dog, Pig, Cow,)
Applications	Flow-Cyt=1μg/Test (Paraffin sections need antigen repair) not yet tested in other applications. optimal dilutions/concentrations should be determined by the end user.
Theoretical molecular weight	22/131kDa
Cellular localization	The cell membrane
Form	Liquid
Concentration	1mg/ml
immunogen	KLH conjugated synthetic peptide derived from human NEP1-40: 1001-1100/1192
Lsotype	IgG
Purification	affinity purified by Protein A
Buffer Solution	1M TBS(pH7.4) with 1% BSA, 3% Proclin300 and 50% Glycerol.
Storage	Shipped at 4°C. Store at -20 °C for one year. Avoid repeated freeze/thaw cycles.

Attention

This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.

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This gene belongs to the family of reticulon encoding genes. Reticulons are associated with the endoplasmic reticulum, and are involved in neuroendocrine secretion or in membrane trafficking in neuroendocrine cells. The product of this gene is a potent neurite outgrowth inhibitor which may also help block the regeneration of the central nervous system in higher vertebrates. Alternatively spliced transcript variants derived both from differential splicing and differential promoter usage and encoding different isoforms have been identified. [provided by RefSeq, Jul 2008].

Function:

Developmental neurite growth regulatory factor with a role as a negative regulator of axon-axon adhesion and growth, and as a facilitator of neurite branching. Regulates neurite fasciculation, branching and extension in the developing nervous system. Involved in down-regulation of growth, stabilization of wiring and restriction of plasticity in the adult CNS. Regulates the radial migration of cortical neurons via an RTN4R-LINGO1 containing receptor complex (By similarity). Isoform 2 reduces the anti-apoptotic activity of Bcl-x1 and Bcl-2. This is likely consecutive to their change in subcellular location, from the mitochondria to the endoplasmic reticulum, after binding and sequestration. Isoform 2 and isoform 3 inhibit BACE1 activity and amyloid precursor protein processing.

Product Detail

Subunit:

Binds to RTN4R. Interacts with Bcl-x1 and Bcl-2. Isoform 2 binds to NGBR and RTN3. Isoform 2 and isoform 3 interact with BACE1 and BACE2. Interacts with RTN4IP1. Interacts with ATL1.

Subcellular Location:

Endoplasmic reticulum membrane. Anchored to the membrane of the endoplasmic reticulum through 2 putative transmembrane domains.

Tissue Specificity:

Isoform 1 is specifically expressed in brain and testis and weakly in heart and skeletal muscle. Isoform 2 is widely expressed except for the liver. Isoform 3 is expressed in brain, skeletal muscle and adipocytes. Isoform 4 is testis-specific.

Similarity:

Contains 1 reticulon domain.

SWISS:
Q9NQC3

Gene ID:
57142

Database links:

[Entrez Gene: 57142](#) Human

[Entrez Gene: 68585](#) Mouse

[Entrez Gene: 83765](#) Rat

[Omim: 604475](#) Human

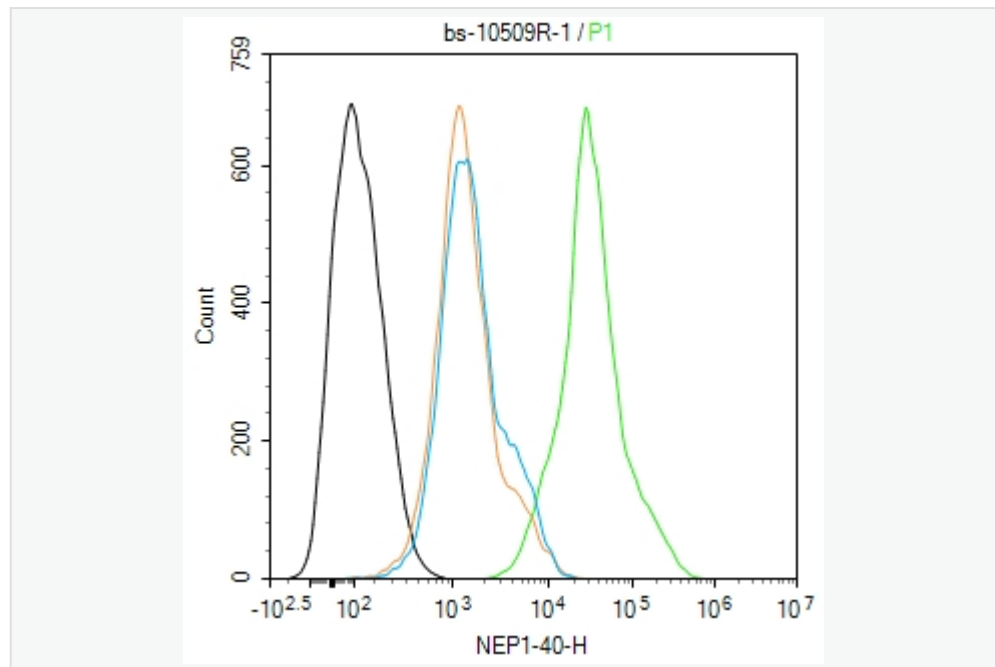
[SwissProt: Q9NQC3](#) Human

[SwissProt: Q99P72](#) Mouse

[SwissProt: Q9JK11](#) Rat

[Unigene: 704007](#) Human

Product Picture



Blank control (black line) :HUVEC.

Primary Antibody (green line): Rabbit Anti-NEP1-40 antibody
(SL10509R)

Dilution: 1ug/Test;

Secondary Antibody (white blue line) : Goat anti-rabbit IgG-AF488

Dilution: 0.5ug/Test.

Isotype control (orange line) : Normal Rabbit IgG

Protocol

The cells were fixed with 4% PFA (10min at room temperature)and then permeabilized with 90% ice-cold methanol for 20 min at -20°C, The cells were then incubated in 5%BSA to block non-specific protein-protein interactions for 30 min at room temperature .Cells stained with Primary Antibody for 30 min at room temperature. The secondary antibody used for 40 min at room temperature. Acquisition of 20,000 events was performed.