SunLong Biotech Co.,LTD
Tel: 0086-571-56623320 Fax:0086-571-56623318
E-mail:sales@sunlongbiotech.com
www.sunlongbiotech.com

Rabbit Anti-Nogo B receptor/Cy5 Conjugated antibody

SL11468R-Cy5

Product Name	Anti-Nogo B receptor/Cy5
Chinese Name	Cy5 标记的轴索过度生长抑制因子 B 受体抗体
Alias	C6orf68; NGBR; nuclear undecaprenyl pyrophosphate synthase 1 homolog; NUS1; NGBR_HUMAN.
Research Area	Cell biology Neurobiology
Immunogen Species	Rabbit
Clonality	Polyclonal
React Species	(predicted:Human,Mouse,Rat,Dog,Pig,Cow,Horse,Sheep)
Applications	ICC/IF=1:50-200,IF=1:100-500 not yet tested in other applications. optimal dilutions/concentrations should be determined by the end user.
Molecular weight	30kDa
Form	Lyophilized or Liquid
Concentration	1mg/ml
immunogen	KLH conjugated synthetic peptide derived from human NGBR/Nogo B receptor (167-210aa)
Lsotype	IgG
Purification	affinity purified by Protein A
Storage Buffer	1M TBS(pH7.4) with 1% BSA, 3% Proclin300 and 50% Glycerol.
Storage	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. The lyophilized antibody is stable at room temperature for at least one month and for greater than a year when kept at -20°C. When reconstituted in sterile pH 7.4 1M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.
Product Detail	**background:** Nogo is an oligodendrocyte-specific member of the Reticulon family and is a component of CNS white matter that inhibits axon outgrowth, induces collapse of growth cones of chick dorsal root ganglion cells, and inhibits the spreading of 3T3 fibroblasts. Nogo is expressed by oligodendrocytes but not

by Schwann cells and associates primarily with the endoplasmic reticulum. Nogo exists in three different splice forms, Nogo-A, -B and -C. NgBR (Nogo-B receptor), also known as nuclear undecaprenyl pyrophosphate synthase 1 homolog, is a 293 amino acid single-pass type I membrane protein that acts as a specific receptor for the amino-terminus of Nogo-B. Through this interaction, NgBR is involved in the regulation of vascular remodeling and angiogenesis. NgBR also enhances Niemann-Pick type C2 protein (NPC2) stabilization. Knockdown of NgBR mRNA leads to decreased NPC2 levels, which results in the hallmarks of NPC2 mutation: increased intracellular cholesterol accumulation and a loss of sterol sensing.

Function:
Acts as a specific receptor for the N-terminus of Nogo-B, a neural and cardiovascular regulator. Able to regulate vascular remodeling and angiogenesis. Its similarity with UPP synthetase proteins suggests that it may act as a scaffold for the binding of isoprenyl lipids and/or prenylated proteins.

Subunit:
Interacts with DHDDS, promoting its isoprenyltransferase activity. Interacts with NPC2.

Subcellular Location:
Endoplasmic reticulum membrane; Single-pass type I membrane protein. Note=Colocalizes with Nogo-B during VEGF and wound healing angiogenesis.

Similarity:
Belongs to the UPP synthase family.

Database links:

Entrez Gene: 116150 Human

Entrez Gene: 52014 Mouse

Entrez Gene: 294400 Rat

Omim: 610463 Human

SwissProt: Q96E22 Human

SwissProt: Q99LJ8 Mouse

Unigene: 289008 Human

Unigene: 525826 Human

Unigene: 199964 Mouse

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