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Nogo B receptor Rabbit pAb

Catalog # AP98047

Product Information

Application	WB, IHC-P, IHC-F, IF, E
Primary Accession	Q96E22
Other Accession	Q96E22
Predicted	Rat, Pig, Human, Mouse, Dog, Horse, Sheep
Host	Rabbit
Clonality	Polyclonal
Calculated MW	33224
Physical State	Liquid
Immunogen	KLH conjugated synthetic peptide derived from human NGBR/Nogo B receptor
Epitope Specificity	167-210/293
Isotype	IgG
Purity	affinity purified by Protein A
Buffer	0.01M TBS (pH7.4) with 1% BSA, 0.02% Proclin300 and 50% Glycerol.
SIMILARITY	Belongs to the UPP synthase family.
SUBUNIT	Interacts with DHDDS, promoting its isoprenyltransferase activity. Interacts with NPC2.
Important Note	This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.
Background Descriptions	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.

Additional Information

Gene ID	116150
Other Names	C6orf68; CDG1AA; MGC:7199; MRD55; NgBR; TANGO14; 1600027K07Rik; D10Ertd438e; RGD1307879; NGBR_HUMAN; NUS1; Cis-prenyltransferase subunit NgBR; Nogo-B receptor (NgBR); Nuclear undecaprenyl pyrophosphate synthase 1 homolog; 2.5.1.87; NGBR_MOUSE; NUS1 dehydrodolichyl diphosphate synthase subunit; chromosome 6 open reading frame 68;

	nuclear undecaprenyl pyrophosphate synthase 1 homolog (S. cerevisiae); Nogo-B receptor; transport and golgi organization 14 homolog (Drosophila)
Dilution	WB=1:500-2000,IHC-P=1:100-500,IHC-F=1:100-500,ICC/IF=1:100-500,IF=1:100-500,ELISA=1:5000-10000
Storage	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.

Protein Information

Name	NUS1 {ECO:0000303|PubMed:28842490, ECO:0000312|HGNC:HGNC:21042}
Function	With DHDDS, forms the dehydrodolichyl diphosphate synthase (DDS) complex, an essential component of the dolichol monophosphate (Dol-P) biosynthetic machinery (PubMed:21572394, PubMed:25066056, PubMed:28842490, PubMed:32817466, PubMed:33077723). Both subunits contribute to enzymatic activity, i.e. condensation of multiple copies of isopentenyl pyrophosphate (IPP) to farnesyl pyrophosphate (FPP) to produce dehydrodolichyl diphosphate (Dedol-PP), a precursor of dolichol phosphate which is utilized as a sugar carrier in protein glycosylation in the endoplasmic reticulum (ER) (PubMed:21572394, PubMed:25066056, PubMed:28842490, PubMed:32817466, PubMed:33077723). Synthesizes long- chain polyprenols, mostly of C95 and C100 chain length (PubMed:32817466). Regulates the glycosylation and stability of nascent NPC2, thereby promoting trafficking of LDL-derived cholesterol (PubMed:21572394). Acts as a specific receptor for the N-terminus of Nogo-B, a neural and cardiovascular regulator (PubMed:16835300).
Cellular Location	Endoplasmic reticulum membrane; Multi-pass membrane protein. Note=Colocalizes with Nogo-B during VEGF and wound healing angiogenesis

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.