Nogo B receptor Rabbit mAb

Catalog No	YP-rAb-17451
Isotype	IgG
Reactivity	Human,Mouse,Rat
Applications	WB
Gene Name	NUS1,C6orf68,NGBR
Protein Name	Dehydrodolichyl diphosphate synthase complex subunit NUS1 (EC 2.5.1.87) (Cis-prenyltransferase subunit NgBR) (Nogo-B receptor) (NgBR) (Nuclear undecaprenyl pyrophosphate synthase 1 homolog)
Purification Process	Protein A
Specificity	Endogenous
Formulation	PBS, 50% glycerol, 0.05% Proclin 300, 0.05%BSA
Source	Monoclonal, Rabbit,IgG
Dilution	WB 1:1000-1:5000;
Concentration	0.5 mg/ml
Purity	≥90%
Storage Stability	-15° C to -25° C/1 year(Do not lower than -25° C)
Synonyms	C6orf68 NGBR
Observed Band	32kD
Calculated Molecular Weight	32kD
Cell Pathway	SUBCELLULAR LOCATION: Endoplasmic reticulum membrane {ECO:0000269|PubMed:19723497, ECO:0000269|PubMed:21572394}; Multi-pass membrane protein {ECO:0000303|PubMed:21572394}. Note=Colocalizes with Nogo-B during VEGF and wound healing angiogenesis. {ECO:0000269|PubMed:19723497}.
Tissue Specificity	
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). {ECO:0000269|PubMed:16835300, ECO:0000269|PubMed:21572394, ECO:0000269|PubMed:25066056, ECO:0000269|PubMed:28842490, ECO:0000269|PubMed:32817466, ECO:0000269|PubMed:33077723}.
Background	This gene encodes a type I single transmembrane domain receptor, which is a subunit of cis-prenyltransferase, and serves as a specific receptor for the neural and cardiovascular regulator Nogo-B. The encoded protein is essential for dolichol synthesis and protein glycosylation. This gene is highly expressed in non-small cell lung carcinomas as well as estrogen receptor-alpha positive breast cancer cells where it promotes epithelial mesenchymal transition. This gene is associated with the poor prognosis of human hepatocellular carcinoma patients. Naturally occurring mutations in this gene cause a congenital disorder of glycosylation and are associated with epilepsy. A knockout of the orthologous gene in mice causes embryonic lethality before day 6.5. Pseudogenes of this gene have been defined on chromosomes 13 and X. [provided by RefSeq, May 2017]
matters needing attention	Avoid repeated freezing and thawing!
Usage suggestions	This product can be used in immunological reaction related experiments. For more information, please consult technical personnel.

Western blot analysis of lysates from A549 cell, primary antibody was diluted at 1:1000, 4° over night, Dylight 800 secondary antibodywas diluted at 1:10000, 37° 1hour.