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ALG14 Antibody (Center)

Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP8903c

Specification

ALG14 Antibody (Center) - Product Information

Application	**WB, FC, IHC-P,E**
Primary Accession	Q96F25
Reactivity	**Human**
Host	**Rabbit**
Clonality	**Polyclonal**
Isotype	**Rabbit IgG**
Antigen Region	**67-93**

ALG14 Antibody (Center) - Additional Information

Gene ID 199857

Other Names
UDP-N-acetylglucosamine transferase subunit ALG14 homolog, ALG14

Target/Specificity
This ALG14 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 67-93 amino acids from the Central region of human ALG14.

Dilution
WB~~1:1000
FC~~1:10~50
IHC-P~~1:50~100
E~~Use at an assay dependent concentration.

Format
Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.

Storage
Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions
ALG14 Antibody (Center) is for research use only and not for use in diagnostic or therapeutic procedures.

ALG14 Antibody (Center) - Protein Information

Name ALG14 (HGNC:28287)

Function Part of the UDP-N-acetylglucosamine transferase complex that operates in the

biosynthetic pathway of dolichol-linked oligosaccharides, the glycan precursors employed in protein asparagine (N)-glycosylation. The assembly of dolichol-linked oligosaccharides begins on the cytosolic side of the endoplasmic reticulum membrane and finishes in its lumen. The sequential addition of sugars to dolichol pyrophosphate produces dolichol-linked oligosaccharides containing fourteen sugars, including two GlcNAcs, nine mannoses and three glucoses. Once assembled, the oligosaccharides are transferred from the lipid to nascent proteins by oligosaccharyltransferases. Functions as a protein-membrane adapter recruiting ALG13 at the cytoplasmic face of the endoplasmic reticulum, where the complex catalyzes the second step of dolichol pyrophosphate biosynthesis, transferring a beta1,4-linked N-acetylglucosamine (GlcNAc) from UDP-GlcNAc to GlcNAc- pyrophosphatedolichol (Gn-PDol) to produce N,N'-diacetylchitobiosyl diphosphodolichol. N,N'-diacetylchitobiosyl diphosphodolichol is a substrate for ALG1, the following enzyme in the biosynthetic pathway.

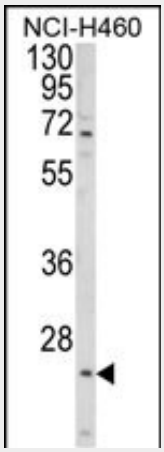
Cellular Location
Endoplasmic reticulum membrane; Single-pass membrane protein

ALG14 Antibody (Center) - Protocols

Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

ALG14 Antibody (Center) - Images



Western blot analysis of ALG14 Antibody (Center) (Cat. #AP8903c) in NCI-H460 cell line lysates (35ug/lane). ALG14 (arrow) was detected using the purified Pab.

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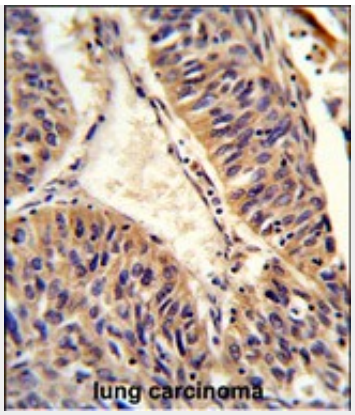
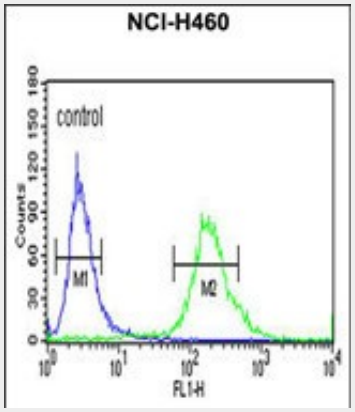


Formalin-fixed and paraffin-embedded human lung carcinoma reacted with ALG14 Antibody (Center), which was peroxidase-conjugated to the secondary antibody, followed by DAB staining. This data demonstrates the use of this antibody for immunohistochemistry; clinical relevance has not been evaluated.



ALG14 Antibody (Center) (Cat. #AP8903c) flow cytometric analysis of NCI-H460 cells (right histogram) compared to a negative control cell (left histogram).FITC-conjugated goat-anti-rabbit secondary antibodies were used for the analysis.

ALG14 Antibody (Center) - Background

ALG14 is involved in protein N-glycosylation. It is essential for the second step of the dolichol-linked oligosaccharide pathway. It anchors the catalytic subunit ALG13 to the ER.

ALG14 Antibody (Center) - References

Gao X.-D., et.al., J. Biol. Chem. 280:36254-36262(2005).

ALG14 Antibody (Center) - Citations

- Congenital myasthenic syndromes due to mutations in ALG2 and ALG14.