

Anti-ALG6 (RABBIT) Antibody

ALG6 Antibody Catalog # ASR3743

Specification

Anti-ALG6 (RABBIT) Antibody - Product Information

Host Rabbit

Conjugated Unconjugated

Target Species
Reactivity
Human
Clonality
Polyclonal

Application WB, IHC, E, I, LCI

Application Note Anti-ALG6 antibody has been tested in

ELISA, western blot, and

immunohistochemistry. Specific conditions for reactivity should be optimized by the end user. Expect a band approximately 58kDa in size corresponding to ALG6 protein by Western blotting in the appropriate cell lysate or extract.

Physical State Liquid (sterile filtered)

Buffer 0.02 M Potassium Phosphate, 0.15 M

Sodium Chloride, pH 7.2

Immunogen This whole rabbit serum was prepared by

repeated immunizations with a synthetic peptide, corresponding to a region near the N-terminus of human ALG6 protein,

conjugated to KLH.

Preservative 0.01% (w/v) Sodium Azide

Anti-ALG6 (RABBIT) Antibody - Additional Information

Gene ID 29929

Purity

ALG6 Antibody antiserum is directed against human ALG6. A 58 kDa band is detected when assayed by immunoblot. Cross reactivity is expected against human ALG6 protein based on a 100% homology of the amino acid sequence of the immunogen between rat, mouse, drosophila, and pongo abelii.

Storage Condition

Store vial at -20° C prior to opening. Aliquot contents and freeze at -20° C or below for extended storage. Avoid cycles of freezing and thawing. Centrifuge product if not completely clear after standing at room temperature. This product is stable for several weeks at 4° C as an undiluted liquid. Dilute only prior to immediate use.

Precautions Note

This product is for research use only and is not intended for therapeutic or diagnostic applications.



Anti-ALG6 (RABBIT) Antibody - Protein Information

Name ALG6 (<u>HGNC:23157</u>)

Function

Dolichyl pyrophosphate Man9GlcNAc2 alpha-1,3- glucosyltransferase 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 oligosaccharide is transferred from the lipid to nascent proteins by oligosaccharyltransferases. In the lumen of the endoplasmic reticulum, adds the first glucose residue from dolichyl phosphate glucose (Dol-P- Glc) onto the lipid-linked oligosaccharide intermediate Man(9)GlcNAc(2)-PP-Dol to produce Glc(1)Man(9)GlcNAc(2)-PP-Dol. Glc(1)Man(9)GlcNAc(2)-PP-Dol is a substrate for ALG8, the following enzyme in the biosynthetic pathway.

Cellular Location

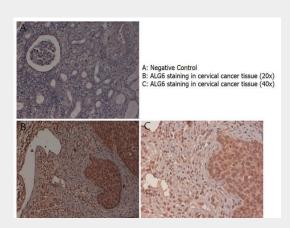
Endoplasmic reticulum membrane; Multi-pass membrane protein

Anti-ALG6 (RABBIT) Antibody - Protocols

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

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- <u>Immunofluorescence</u>
- <u>Immunoprecipitation</u>
- Flow Cytomety
- Cell Culture

Anti-ALG6 (RABBIT) Antibody - Images



Immunohistochemistry with anti-ALG6 antibody showing ALG6 staining in the squamous epithelium of the uterine cervix as well as in inflammatory elements diffused in the stroma of human cervical cancer tissue at 20x and 40x (B & C). Formalin fixed/paraffin embedded sections were subjected to heat induced epitope retrieval (HIER) at pH 6.2 and then incubated with rabbit





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anti-human ALG6 antibody at 4.0 µg/ml for 60 minutes. The reaction was developed using MACH 1 universal HRP polymer detection system and visualized with 3'3-diamino-benzidine substrate (DAB).

Anti-ALG6 (RABBIT) Antibody - Background

Anti-ALG6 antibody was designed, produced, and validated as part of the loy Cappel Young Investigator Award (JCYIA). Dolichyl pyrophosphate Man9GlcNAc2 alpha-1,3-glucosyltransferase is an enzyme that is encoded by the ALG6 gene in humans. This gene encodes ALG6/ALG8 member of glucosyltransferase family. The encoded protein catalyzes the addition of the first glucose residue to the growing lipid-linked oligosaccharide precursor of N-linked glycosylation. Mutations in this gene are associated with congenital disorders of glycosylation type. Anti-ALG6 is ideal for researchers interested in Infectious disease, especially HIV and hepatitis virus infections. Anti-ALG6 antibody is applicable to methods for diagnosis and, in particular, to methods for diagnosing infections using biomarkers targeting exosomes secreted in bodily fluids.