

ALG6 (Z164): sc-100506

BACKGROUND

ALG6 (asparagine-linked glycosylation 6 homolog), is a 507 amino acid member of the ALG6/ALG8 glucosyltransferase family that functions as an α 1,3-glucosyltransferase required for proper asparagine-linked glycosylation of proteins. ALG6 is a multi-pass membrane protein that localizes to the endoplasmic reticulum (ER). Specifically, ALG6 adds the first of three glucose residues added to dolichylpyrophosphate-linked oligosaccharide, a precursor for N-linked glycosylation. Mutations in the gene encoding ALG6 disrupt protein glycosylation and result in congenital disorder of glycosylation type 1C (CDG1C). CDG1C is a multisystem disease characterized by under-glycosylated serum proteins. Patients with CDG1C exhibit delayed statomotor development, are mentally retarded and have muscular hypotonia.

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: ALG6 (human) mapping to 1p31.3; Alg6 (mouse) mapping to 4 C6.

SOURCE

ALG6 (Z164) is a mouse monoclonal antibody raised against recombinant ALG6 of human origin.

PRODUCT

Each vial contains 50 μ g IgG_{2a} kappa light chain in 0.5 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

APPLICATIONS

ALG6 (Z164) is recommended for detection of ALG6 of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 μ g per 100-500 μ g of total protein (1 ml of cell lysate)] and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

Suitable for use as control antibody for ALG6 siRNA (h): sc-88385, ALG6 siRNA (m): sc-141016, ALG6 shRNA Plasmid (h): sc-88385-SH, ALG6 shRNA Plasmid (m): sc-141016-SH, ALG6 shRNA (h) Lentiviral Particles: sc-88385-V and ALG6 shRNA (m) Lentiviral Particles: sc-141016-V.

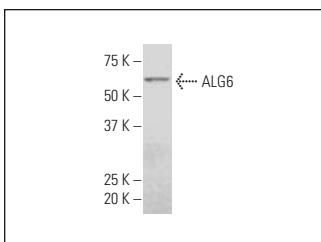
Molecular Weight of ALG6: 58 kDa.

Positive Controls: HeLa nuclear extract: sc-2120.

RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended: 1) Western Blotting: use m-IgG κ BP-HRP: sc-516102 or m-IgG κ BP-HRP (Cruz Marker): sc-516102-CM (dilution range: 1:1000-1:10000), Cruz Marker[™] Molecular Weight Standards: sc-2035, UltraCruz[®] Blocking Reagent: sc-516214 and Western Blotting Luminol Reagent: sc-2048. 2) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml).

DATA



ALG6 (Z164): sc-100506. Western blot analysis of ALG6 expression in HeLa nuclear extract.

STORAGE

Store at 4° C, ****DO NOT FREEZE****. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

RESEARCH USE

For research use only, not for use in diagnostic procedures.