

ALG6 (N-14): sc-162521

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 (N-14) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the N-terminus of ALG6 of human origin.

PRODUCT

Each vial contains 200 μ g IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-162521 P, (100 μ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

ALG6 (N-14) 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), immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000); non cross-reactive with other ALG family members.

ALG6 (N-14) is also recommended for detection of ALG6 in additional species, including equine, canine, bovine, porcine and avian.

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 SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use donkey anti-goat IgG-HRP: sc-2020 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible donkey anti-goat IgG-HRP: sc-2033 (dilution range: 1:2000-1:5000), Cruz Marker™ Molecular Weight Standards: sc-2035, TBS Blotto A Blocking Reagent: sc-2333 and Western Blotting Luminol Reagent: sc-2048. 2) Immunofluorescence: use donkey anti-goat IgG-FITC: sc-2024 (dilution range: 1:100-1:400) or donkey anti-goat IgG-TR: sc-2783 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

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.

PROTOCOLS

See our web site at www.scbt.com or our catalog for detailed protocols and support products.