

ALG3 (E-14): sc-99262

BACKGROUND

ALG3 (asparagine-linked glycosylation 3), also known as CDGS4, Not56 or NOT56L, is a 438 amino acid multi-pass membrane protein that localizes to the endoplasmic reticulum and participates in the pathway of protein glycosylation. One of several members of the glycosyltransferase superfamily, ALG3 functions to catalyze the transfer of an α -D-mannosyl residue from dolichyl-phosphate D-mannose onto a membrane lipid-linked oligosaccharide, thereby playing an essential role in protein modification events. Defects in the gene encoding ALG3 are the cause of congenital disorder of glycosylation type 1D (CDG1D), a metabolic deficiency that can lead to severe mental and psychomotor retardation.

REFERENCES

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- Schollen, E., et al. 2005. CDG-1d caused by homozygosity for an ALG3 mutation due to segmental maternal isodisomy UPD3(q21.3-qter). *Eur. J. Med. Genet.* 48: 153-158.

CHROMOSOMAL LOCATION

Genetic locus: ALG3 (human) mapping to 3q27.1; Alg3 (mouse) mapping to 16 B1.

SOURCE

ALG3 (E-14) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the C-terminus of ALG3 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-99262 P, (100 μ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

STORAGE

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

APPLICATIONS

ALG3 (E-14) is recommended for detection of ALG3 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)], 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).

ALG3 (E-14) is also recommended for detection of ALG3 in additional species, including equine, canine, bovine, porcine and avian.

Suitable for use as control antibody for ALG3 siRNA (h): sc-78191, ALG3 siRNA (m): sc-141007, ALG3 shRNA Plasmid (h): sc-78191-SH, ALG3 shRNA Plasmid (m): sc-141007-SH, ALG3 shRNA (h) Lentiviral Particles: sc-78191-V and ALG3 shRNA (m) Lentiviral Particles: sc-141007-V.

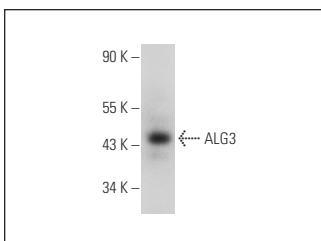
Molecular Weight of ALG3: 50 kDa.

Positive Controls: mouse placenta extract: sc-364247.

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) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) 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.

DATA



ALG3 (E-14): sc-99262. Western blot analysis of ALG3 expression in mouse placenta tissue extract.

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.