# SANTA CRUZ BIOTECHNOLOGY, INC.

# ALG10/ALG10B (N-14): sc-109491



#### BACKGROUND

Glycosylation of asparagine residues is an essential protein modification reaction that occurs upon most proteins that enter the secretory pathway in eukaryotic cells. Asparagine-linked oligosaccharides are transferred onto polypeptides in the lumen of the rough endoplasmic reticulum. ALG10/ALG10B, also known as DIE2 or KCR1, is a 473 amino acid multi-pass membrane protein that localizes to the endoplasmic reticulum. ALG10/ALG10B adds the third glucose residue to the lipid-linked oligosaccharide precursor for N-linked glycosylation and transfers glucose from dolichyl phosphate glucose onto the lipid-linked Glc2Man9GlcNAc2 oligosaccharide.

#### REFERENCES

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- 3. Nagayama, Y., Nishihara, E., Namba, H., Yamashita, S. and Niwa, M. 2000. Identification of the sites of asparagine-linked glycosylation on the human thyrotropin receptor and studies on their role in receptor function and expression. J. Pharmacol. Exp. Ther. 295: 404-409.
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#### CHROMOSOMAL LOCATION

Genetic locus: ALG10 (human) mapping to 12p11.1, ALG10B (human) mapping to 12q12.

# **STORAGE**

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

### SOURCE

ALG10/ALG10B (N-14) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an N-terminal extracellular domain of ALG10 of human origin.

# PRODUCT

Each vial contains 200 µg lgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-109491 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

### **APPLICATIONS**

ALG10/ALG10B (N-14) is recommended for detection of ALG10 and ALG10B of 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).

ALG10/ALG10B (N-14) is also recommended for detection of ALG10 and ALG10B in additional species, including equine, canine, bovine, porcine and avian.

Molecular Weight of ALG10/ALG10B: 56 kDa.

# **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<sup>™</sup> 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.

# **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.