SANTA CRUZ BIOTECHNOLOGY, INC.

ALG11 (G-22): sc-130950



The Power to Question

BACKGROUND

ALG11 (asparagine-linked glycosylation 11), also known as GT8 or UTP14C, is a 492 amino acid multi-pass membrane proteins that is thought to play a role in spermatogenesis and is encoded by a gene which maps to chromosome 13. Comprising nearly 4% of the human genome, chromosome 13 contains around 114 million base pairs and encodes over 400 genes. Chromosome 13 houses key tumor suppressor genes, including BRCA2 and RB1, which are associated with breast cancer susceptibility and retinoblastoma, respectively. Trisomy 13, also known as Patau syndrome, is deadly and the few who survive past one year suffer from permanent neurologic defects, difficulty eating and vulnerability to serious respiratory infections.

REFERENCES

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- Dunham, A., et al. 2004. The DNA sequence and analysis of human chromosome 13. Nature 428: 522-528.
- O'Reilly, M.K., et al. 2006. *In vitro* evidence for the dual function of ALG2 and ALG11: essential mannosyltransferases in N-linked glycoprotein biosynthesis. Biochemistry 45: 9593-9603.
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- Hassler, M., et al. 2007. Crystal structure of the retinoblastoma protein N domain provides insight into tumor suppression, ligand interaction and holoprotein architecture. Mol. Cell 28: 371-385.

CHROMOSOMAL LOCATION

Genetic locus: ALG11 (human) mapping to 13q14.3; Alg11 (mouse) mapping to 8 A2.

SOURCE

ALG11 (G-22) is an affinity purified rabbit polyclonal antibody raised against synthetic ALG11 peptide of human origin.

STORAGE

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

PRODUCT

Each vial contains 50 μg lgG in 500 μl PBS with < 0.1% sodium azide, 0.1% gelatin and < 0.02% sucrose.

APPLICATIONS

ALG11 (G-22) is recommended for detection of ALG11 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), immunohistochemistry (including paraffin-embedded sections) (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

Suitable for use as control antibody for ALG11 siRNA (h): sc-105053, ALG11 siRNA (m): sc-141011, ALG11 shRNA Plasmid (h): sc-105053-SH, ALG11 shRNA Plasmid (m): sc-141011-SH, ALG11 shRNA (h) Lentiviral Particles: sc-105053-V and ALG11 shRNA (m) Lentiviral Particles: sc-141011-V.

Molecular Weight of ALG11: 56 kDa.

Positive Controls: Hep G2 cell lysate: sc-2227.

RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use goat anti-rabbit IgG-HRP: sc-2004 (dilution range: 1:2000-1:100,000) or Cruz Marker[™] compatible goat anti-rabbit IgG-HRP: sc-2030 (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 goat anti-rabbit IgG-FITC: sc-2012 (dilution range: 1:100-1:400) or goat anti-rabbit IgG-TR: sc-2780 (dilution range: 1:100-1:400) with UltraCruz[™] Mounting Medium: sc-24941. 4) Immuno-histochemistry: use ImmunoCruz[™]: sc-2051 or ABC: sc-2018 rabbit IgG Staining Systems.

DATA

70 K –		
60 K –	-	√ ALG11
48 K –		
36 K –		
11 (C 22): sc 120050. Western blot analysis o		

ALG11 (G-22): sc-130950. Western blot analysis ALG11 expression in Hep G2 whole cell lysate.

RESEARCH USE

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