

Gle1 (S-15): sc-74932

BACKGROUND

Protein transport across the nucleus is a selective, multi-step process involving several cytoplasmic factors that mediate protein passage through the nuclear pore complex (NPC). Gle1, also known as GLE1L, is a 698 amino acid protein that localizes to both the nucleus and the cytoplasm and belongs to the Gle1 family. Expressed as two alternatively spliced isoforms, Gle1 associates with the NPC and is required for the transport of poly(A)-containing mRNAs from the nucleus to the cytoplasm. Defects in the gene encoding Gle1 are the cause of lethal congenital contracture syndrome type 1 (LCCS1) and lethal arthrogryposis with anterior horn cell disease (LAAHD), the former of which is characterized by early fetal hydrops and akinesia, micrognathia, pulmonary hypoplasia, pterygia and prenatal death, while the latter is associated with respiratory failure.

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: GLE1 (human) mapping to 9q34.11; Gle1 (mouse) mapping to 2 B.

STORAGE

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

SOURCE

Gle1 (S-15) is an affinity purified rabbit polyclonal antibody raised against a peptide mapping within an internal region of Gle1 of human origin.

PRODUCT

Each vial contains 100 µg IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-74932 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

Gle1 (S-15) is recommended for detection of Gle1 of mouse, rat and human origin by Western Blotting (starting dilution 1:100, dilution range 1:50-1:500), immunofluorescence (starting dilution 1:25, dilution range 1:25-1:250) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

Gle1 (S-15) is also recommended for detection of Gle1 in additional species, including equine, canine, bovine and porcine.

Suitable for use as control antibody for Gle1 siRNA (h): sc-75138, Gle1 siRNA (m): sc-75139, Gle1 shRNA Plasmid (h): sc-75138-SH, Gle1 shRNA Plasmid (m): sc-75139-SH, Gle1 shRNA (h) Lentiviral Particles: sc-75138-V and Gle1 shRNA (m) Lentiviral Particles: sc-75139-V.

Molecular Weight of Gle1: 75 kDa.

Positive Controls: Mouse thymus extract: sc-2406.

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) 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.

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.