

SIL1 (Q-18): sc-49737

BACKGROUND

The UPR-regulated gene SIL1 encodes the protein named nucleotide exchange factor SIL1. SIL1 is an N-linked glycoprotein that localizes to the endoplasmic reticulum (ER) and contains an N-terminal ER targeting sequence, two putative N-glycosylation sites and a C-terminal ER-retention signal. It acts as a nucleotide exchange factor for ER luminal chaperone HSPA5 and is important for both protein translocation and protein folding in the ER. SIL1 is highly expressed in liver, kidney and placenta, and shows moderate expression in spleen, thymus, heart, colon and ovary, while demonstrating weak expression in the brain. During fetal development, SIL1 is expressed at high levels in kidney, lung and liver. Defects in the SIL1 gene can cause Marinesco-Sjögren syndrome (MSS), an autosomal recessive multisystem disorder characterized by progressive myopathy, cerebellar ataxia and cataracts.

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: SIL1 (human) mapping to 5q31.2; Sil1 (mouse) mapping to 18 B1-B2.

SOURCE

SIL1 (Q-18) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the N-terminus of SIL1 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 200 µg IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-49737 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

SIL1 (Q-18) is recommended for detection of SIL1 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).

SIL1 (Q-18) is also recommended for detection of SIL1 in additional species, including equine, canine, bovine and avian.

Suitable for use as control antibody for SIL1 siRNA (h): sc-61553, SIL1 siRNA (m): sc-61554, SIL1 shRNA Plasmid (h): sc-61553-SH, SIL1 shRNA Plasmid (m): sc-61554-SH, SIL1 shRNA (h) Lentiviral Particles: sc-61553-V and SIL1 shRNA (m) Lentiviral Particles: sc-61554-V.

Positive Controls: K-562 whole cell lysate: sc-2203 or HEL 92.1.7 cell lysate: sc-2270.

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.

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.