SANTA CRUZ BIOTECHNOLOGY, INC.

POMT1 (K-15): sc-48914

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The Power to Question

BACKGROUND

O-mannosylation is an essential protein modification in eukaryotes that is initiated by an evolutionarily conserved family of protein O-mannosyltransferases. The POMT1 (protein O-mannosyltransferase 1) protein consists of 725 amino acids. POMT1 contains seven to twelve presumed transmembrane regions and a C-terminal ER membrane retention signal; RT-PCR reveals several mRNA splice variants. RNA dot blot analysis indicates ubiquitous expression of POMT1, with maximum levels in testis and high levels in fetal brain and pituitary tissues. Walker-Warburg syndrome (WWS), a severe, recessive, congenital muscular dystrophy associated with defects in neuronal migration that produce complex brain and eye abnormalities, is caused by mutations in the POMT1 gene.

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: POMT1 (human) mapping to 9q34.13; Pomt1 (mouse) mapping to 2 B.

SOURCE

POMT1 (K-15) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of POMT1 of human origin.

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-48914 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

POMT1 (K-15) is recommended for detection of POMT1 isoforms 1, 2 and 3 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).

POMT1 (K-15) is also recommended for detection of POMT1 isoforms 1, 2 and 3 in additional species, including equine, canine, bovine and porcine.

Suitable for use as control antibody for POMT1 siRNA (h): sc-61379, POMT1 siRNA (m): sc-61380, POMT1 shRNA Plasmid (h): sc-61379-SH, POMT1 shRNA Plasmid (m): sc-61380-SH, POMT1 shRNA (h) Lentiviral Particles: sc-61379-V and POMT1 shRNA (m) Lentiviral Particles: sc-61380-V.

Molecular Weight of POMT1: 75 kDa.

Positive Controls: Mouse testis extract: sc-2405 or F9 cell lysate: sc-2245.

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.

STORAGE

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

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.