

SLC35D2 (C-14): sc-165497

BACKGROUND

SLC35D2 (solute carrier family 35, member D2), also known as UDP-N-acetylglucosamine/UDP-glucose/GDP-mannose transporter, HFRC1, SQV7L or UGTREL8, is a 337 amino acid multi-pass membrane protein belonging to the TPT transporter family and SLC35D subfamily. Localizing to Golgi apparatus membrane, SLC35D2 is highly expressed in heart, kidney, small intestine, placenta, lung and peripheral blood leukocyte, with lower levels of expression found in skeletal muscle and spleen. SLC35D2 functions as an antiporter, mediating the translocation of nucleotide sugars from the cytosol to the lumen, and may be involved in growth factor signaling by taking part in heparan sulfate synthesis. SLC35D2 exists as two alternatively spliced isoforms.

REFERENCES

- Herman, T., et al. 1999. Three proteins involved in *Caenorhabditis elegans* vulval invagination are similar to components of a glycosylation pathway. *Proc. Natl. Acad. Sci. USA* 96: 974-979.
- Suda, T., et al. 2004. Molecular cloning and characterization of a human multisubstrate specific nucleotide-sugar transporter homologous to *Drosophila* fringe connection. *J. Biol. Chem.* 279: 26469-26474.
- Ishida, N., et al. 2005. Identification and characterization of human Golgi nucleotide sugar transporter SLC35D2, a novel member of the SLC35 nucleotide sugar transporter family. *Genomics* 85: 106-116.
- Nishimura, M., et al. 2009. Tissue-specific mRNA expression profiles of human solute carrier 35 transporters. *Drug Metab. Pharmacokin.* 24: 91-99.
- Sesma, J.I., et al. 2009. Endoplasmic reticulum/Golgi nucleotide sugar transporters contribute to the cellular release of UDP-sugar signaling molecules. *J. Biol. Chem.* 284: 12572-12583.

CHROMOSOMAL LOCATION

Genetic locus: SLC35D2 (human) mapping to 9q22.32; Slc35d2 (mouse) mapping to 13 B3.

SOURCE

SLC35D2 (C-14) is an affinity purified goat polyclonal antibody raised against a peptide mapping within a C-terminal cytoplasmic domain of SLC35D2 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.

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.

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-165497 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

SLC35D2 (C-14) is recommended for detection of SLC35D2 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); non cross-reactive with SLC35D1 or SLC35D3.

SLC35D2 (C-14) is also recommended for detection of SLC35D2 in additional species, including porcine.

Suitable for use as control antibody for SLC35D2 siRNA (h): sc-92798, SLC35D2 siRNA (m): sc-153537, SLC35D2 shRNA Plasmid (h): sc-92798-SH, SLC35D2 shRNA Plasmid (m): sc-153537-SH, SLC35D2 shRNA (h) Lentiviral Particles: sc-92798-V and SLC35D2 shRNA (m) Lentiviral Particles: sc-153537-V.

Molecular Weight of SLC35D2: 32/22 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™ 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.