

SLC35A4 (N-15): sc-244167

BACKGROUND

SLC35A4 (solute carrier family 35, member A4) is a 324 amino acid multi-pass membrane protein that belongs to the nucleotide-sugar transporter (NST) family and the SLC35A subfamily. Members of the NST family are transmembrane proteins that mediate the translocation of nucleotide-sugars from the cytosol to the interior lumen of the endoplasmic reticulum and the Golgi apparatus via an antiport mechanism, exchanging nucleoside monophosphates for nucleotide-sugars. This activity of NSTs is important for providing an available source of nucleotide-sugars for glycoconjugate synthesis. The SLC35A4 protein localizes to Golgi apparatus. The SLC35A4 gene is conserved in chimpanzee, canine, bovine, mouse, rat, chicken and zebrafish, and maps to human chromosome 5q31.3. With 181 million base pairs encoding around 1,000 genes, chromosome 5 is about 6% of human genomic DNA. Deletion of 5q or chromosome 5 altogether is common in therapy-related acute myelogenous leukemias and myelodysplastic syndrome.

REFERENCES

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3. Ishida, N. and Kawakita, M. 2004. Molecular physiology and pathology of the nucleotide sugar transporter family (SLC35). *Pflugers Arch.* 447: 768-775.
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6. Nishimura, M., Suzuki, S., Satoh, T. and Naito, S. 2009. Tissue-specific mRNA expression profiles of human solute carrier 35 transporters. *Drug Metab. Pharmacokinet.* 24: 91-99.

CHROMOSOMAL LOCATION

Genetic locus: SLC35A4 (human) mapping to 5q31.3.

SOURCE

SLC35A4 (N-15) is an affinity purified goat polyclonal antibody raised against a peptide mapping at the N-terminus of SLC35A4 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-244167 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

SLC35A4 (N-15) is recommended for detection of SLC35A4 of human and rat 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 other SLC family members.

SLC35A4 (N-15) is also recommended for detection of SLC35A4 in additional species, including equine, canine and bovine.

Suitable for use as control antibody for SLC35A4 siRNA (h): sc-91770, SLC35A4 shRNA Plasmid (h): sc-91770-SH and SLC35A4 shRNA (h) Lentiviral Particles: sc-91770-V.

Molecular Weight of SLC35A4: 35 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.

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.