

CST (C-13): sc-167555

BACKGROUND

CST, also known as SLC35A1 (solute carrier family 35 member A1), CMP-sialic acid transporter (CMP-Sia-Tr) or CMPST, is a 337 amino acid multi-pass membrane protein of the Golgi apparatus that transfers CMP-sialic acid and other nucleotide sugars into the lumen of Golgi vesicles from the cytosol. A member of the nucleotide-sugar transporter family and SLC35A subfamily, CST is encoded by a gene that maps to human chromosome 6q15 and mouse chromosome 4 A5. Defects in the gene encoding CST are the cause of congenital disorder of glycosylation type 2F (CDG2F), a disease caused by defective protein N-glycosylation. CDG2F is characterized by under-glycosylated serum proteins and affects multiple systems of patients with the disease.

REFERENCES

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3. Ishida, N., et al. 1998. Functional expression of human golgi CMP-sialic acid transporter in the Golgi complex of a transporter-deficient Chinese hamster ovary cell mutant. *J. Biochem.* 124: 171-178.
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7. Zhao, W., et al. 2006. The CMP-sialic acid transporter is localized in the medial-*trans* Golgi and possesses two specific endoplasmic reticulum export motifs in its carboxyl-terminal cytoplasmic tail. *J. Biol. Chem.* 281: 31106-31118.
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CHROMOSOMAL LOCATION

Genetic locus: SLC35A1 (human) mapping to 6q15; Slc35a1 (mouse) mapping to 4 A5.

SOURCE

CST (C-13) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the C-terminus of CST 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-167555 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

CST (C-13) is recommended for detection of CST 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).

CST (C-13) is also recommended for detection of CST in additional species, including equine, canine, bovine, porcine and avian.

Suitable for use as control antibody for CST siRNA (h): sc-95545, CST siRNA (m): sc-142606, CST shRNA Plasmid (h): sc-95545-SH, CST shRNA Plasmid (m): sc-142606-SH, CST shRNA (h) Lentiviral Particles: sc-95545-V and CST shRNA (m) Lentiviral Particles: sc-142606-V.

Molecular Weight of CST: 37 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.