

# SLC35C1 (Y-13): sc-132832

## BACKGROUND

SLC35C1 (solute carrier family 35, member C1), also known as FucT-I (GDP-fucose transporter 1), is a multi-pass membrane protein that belongs to the SLC35C subfamily of the nucleotide-sugar transporter (NST) family. 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 (ER) 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. Localizing to the golgi apparatus membrane, SLC35C1 participates in the transport of GDP-fucose from the cytoplasm into the golgi lumen. Mutations in the gene encoding SLC35C1 are associated with CDG2C (congenital disorder of glycosylation type 2C), also known as LAD2 (leukocyte adhesion deficiency type II). CDG2C is characterized by the lack of fucosylated glycoproteins and symptoms include short stature, mental retardation, elevated peripheral leukocytes and facial stigmata.

## REFERENCES

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## CHROMOSOMAL LOCATION

Genetic locus: SLC35C1 (human) mapping to 11p11.2; Slc35c1 (mouse) mapping to 2 E1.

## SOURCE

SLC35C1 (Y-13) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of SLC35C1 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-132832 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

## APPLICATIONS

SLC35C1 (Y-13) is recommended for detection of SLC35C1 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 other SLC35 family members.

SLC35C1 (Y-13) is also recommended for detection of SLC35C1 in additional species, including equine, canine, bovine, porcine and avian.

Suitable for use as control antibody for SLC35C1 siRNA (h): sc-96300, SLC35C1 siRNA (m): sc-153534, SLC35C1 shRNA Plasmid (h): sc-96300-SH, SLC35C1 shRNA Plasmid (m): sc-153534-SH, SLC35C1 shRNA (h) Lentiviral Particles: sc-96300-V and SLC35C1 shRNA (m) Lentiviral Particles: sc-153534-V.

Molecular Weight of SLC35C1: 40 kDa.

Positive Controls: Jurkat whole cell lysate: sc-2204.

## 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](http://www.scbt.com) or our catalog for detailed protocols and support products.