

# SLC35F5 (Y-13): sc-137773

## BACKGROUND

SLC35F5 (solute carrier family 35 member F5), also known as hepatitis C virus NS5A-transactivated protein 3, is a 523 amino acid multi-pass membrane protein that belongs to the SLC35F solute transporter family. Existing as two alternatively spliced isoforms, SLC35F5 functions as a putative solute transporter. The gene encoding SLC35F5 maps to human chromosome 2, which houses over 1,400 genes and comprises nearly 8% of the human genome. Harlequin ichthyosis, a rare and morbid skin deformity, is associated with mutations in the chromosome 2-localized ABCA12 gene, while the lipid metabolic disorder sitosterolemia is associated with defects in the ABCG5 and ABCG8 genes, which also map to chromosome 2.

## REFERENCES

1. Yunis, J.J., et al. 1982. The origin of man: a chromosomal pictorial legacy. *Science* 215: 1525-1530.
2. Ijdo, J.W., et al. 1991. Origin of human chromosome 2: an ancestral telomere-telomere fusion. *Proc. Natl. Acad. Sci. USA* 88: 9051-9055.
3. Avarello, R., et al. 1992. Evidence for an ancestral alphoid domain on the long arm of human chromosome 2. *Hum. Genet.* 89: 247-249.
4. Ishida, N., et al. 2004. Molecular physiology and pathology of the nucleotide sugar transporter family (SLC35). *Pflugers Arch.* 447: 768-775.
5. Hillier, L.W., et al. 2005. Generation and annotation of the DNA sequences of human chromosomes 2 and 4. *Nature* 434: 724-731.
6. Matsuyama, R., et al. 2006. Predicting 5-fluorouracil chemosensitivity of liver metastases from colorectal cancer using primary tumor specimens: three-gene expression model predicts clinical response. *Int. J. Cancer* 119: 406-413.
7. Nishimura, M., et al. 2009. Tissue-specific mRNA expression profiles of human solute carrier 35 transporters. *Drug Metab. Pharmacokinet.* 24: 91-99.

## CHROMOSOMAL LOCATION

Genetic locus: SLC35F5 (human) mapping to 2q14.1; Slc35f5 (mouse) mapping to 1 E3.

## SOURCE

SLC35F5 (Y-13) is an affinity purified rabbit polyclonal antibody raised against a peptide mapping within an internal region of SLC35F5 of human origin.

## PRODUCT

Each vial contains 100 µg IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-137773 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

## STORAGE

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

## APPLICATIONS

SLC35F5 (Y-13) is recommended for detection of SLC35F5 isoforms 1 and 2 of mouse, rat and human origin by Western Blotting (starting dilution 1:100, dilution range 1:50-1:500), immunofluorescence (starting dilution 1:25, dilution range 1:25-1:250) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000); non cross-reactive with other SLC35F family members.

SLC35F5 (Y-13) is also recommended for detection of SLC35F5 isoforms 1 and 2 in additional species, including canine, bovine, porcine and avian.

Suitable for use as control antibody for SLC35F5 siRNA (h): sc-94372, SLC35F5 siRNA (m): sc-153546, SLC35F5 shRNA Plasmid (h): sc-94372-SH, SLC35F5 shRNA Plasmid (m): sc-153546-SH, SLC35F5 shRNA (h) Lentiviral Particles: sc-94372-V and SLC35F5 shRNA (m) Lentiviral Particles: sc-153546-V.

Molecular Weight of SLC35F5: 59 kDa.

## RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use goat anti-rabbit IgG-HRP: sc-2004 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible goat anti-rabbit IgG-HRP: sc-2030 (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 goat anti-rabbit IgG-FITC: sc-2012 (dilution range: 1:100-1:400) or goat anti-rabbit IgG-TR: sc-2780 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

## 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.