

# SLC35E4 (S-14): sc-86873

## BACKGROUND

SLC35E4 (solute carrier family 35, member E4) is a 350 amino acid multi-pass membrane protein and putative transporter that contains one DUF6 domain. A member of the TPT transporter family and SLC35E subfamily, SLC35E4 exists as two alternatively spliced isoforms that are encoded by a gene that maps to human chromosome 22q12.2. Chromosome 22 houses over 500 genes and is the second smallest human chromosome. Mutations in several of the genes that map to chromosome 22 are involved in the development of Phelan-McDermid syndrome, Neurofibromatosis type 2, autism and schizophrenia. Additionally, translocations between chromosomes 9 and 22 may lead to the formation of the Philadelphia Chromosome and the subsequent production of the novel fusion protein BCR-Abl, a potent cell proliferation activator found in several types of leukemias.

## REFERENCES

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2. Gothelf, D., Schaer, M. and Eliez, S. 2008. Genes, brain development and psychiatric phenotypes in velo-cardio-facial syndrome. *Dev. Disabil. Res. Rev.* 14: 59-68.
3. Sathyamoorthi, S., Morales, J., Bermudez, J., McBride, L., Luquette, M., McGoey, R., Oates, N., Hales, S., Biegel, J.A. and Lacassie, Y. 2009. Array analysis and molecular studies of INI1 in an infant with deletion 22q13 (Phelan-McDermid syndrome) and atypical teratoid/rhabdoid tumor. *Am. J. Med. Genet. A.* 149A: 1067-1069.
4. Vorstman, J.A., Chow, E.W., Ophoff, R.A., van Engeland, H., Beemer, F.A., Kahn, R.S., Sinke, R.J. and Bassett, A.S. 2009. Association of the PIK4CA schizophrenia-susceptibility gene in adults with the 22q11.2 deletion syndrome. *Am. J. Med. Genet. B Neuropsychiatr. Genet.* 150B: 430-433.
5. Evans, D.G. 2009. Neurofibromatosis 2 [Bilateral acoustic neurofibromatosis, central neurofibromatosis, NF2, neurofibromatosis type II]. *Genet. Med.* 11: 599-610.

## CHROMOSOMAL LOCATION

Genetic locus: SLC35E4 (human) mapping to 22q12.2.

## SOURCE

SLC35E4 (S-14) is an affinity purified rabbit polyclonal antibody raised against a peptide mapping within an internal region of SLC35E4 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.

## PROTOCOLS

See our web site at [www.scbt.com](http://www.scbt.com) or our catalog for detailed protocols and support products.

## 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-86873 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

## APPLICATIONS

SLC35E4 (S-14) is recommended for detection of SLC35E4 of human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)], 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.

SLC35E4 (S-14) is also recommended for detection of SLC35E4 in additional species, including equine, canine, bovine and porcine.

Suitable for use as control antibody for SLC35E4 siRNA (h): sc-76510, SLC35E4 shRNA Plasmid (h): sc-76510-SH and SLC35E4 shRNA (h) Lentiviral Particles: sc-76510-V.

Molecular Weight (predicted) of SLC35E4 isoforms: 37/25 kDa.

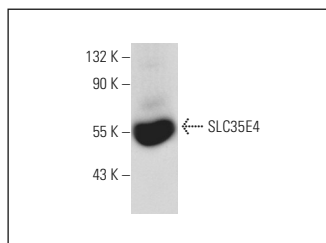
Molecular Weight (observed) of SLC35E4: 55 kDa.

Positive Controls: HeLa whole cell lysate: sc-2200.

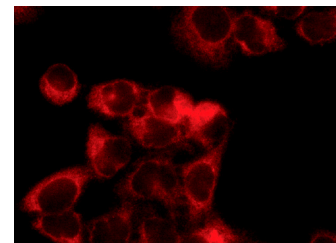
## RECOMMENDED SECONDARY REAGENTS

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) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) 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.

## DATA



SLC35E4 (S-14): sc-86873. Western blot analysis of SLC35E4 expression in HeLa whole cell lysate.



SLC35E4 (S-14): sc-86873. Immunofluorescence staining of methanol-fixed HeLa cells showing cytoplasmic localization.

## RESEARCH USE

For research use only, not for use in diagnostic procedures.