

# SLC25A35 (K-14): sc-244160

## BACKGROUND

Members of the SLC25 family of mitochondrial carrier proteins are known transporters of molecules over the mitochondrial membrane and are highly expressed in the central nervous system. SLC25A35 (solute carrier family 25, member 35) is a 300 amino acid multi-pass membrane protein belonging to the SLC25 family of mitochondrial carrier proteins. Localizing to the inner mitochondrial membrane and containing three solcar repeats, SLC25A35 exists as four alternatively spliced isoforms. The gene encoding SLC25A35 is located on human chromosome 17p13.1. Chromosome 17 makes up over 2.5% of the human genome with about 81 million bases encoding over 1,200 genes. Neurofibromatosis, a condition characterized by neural and epidermal lesions, and dysregulated Schwann cell growth are both linked to mutations on Chromosome 17. Alexander disease, Birt-Hogg-Dube syndrome and Canavan disease are also associated with chromosome 17.

## REFERENCES

1. Naito, E., et al. 2002. Type II citrullinaemia (citrin deficiency) in a neonate with hypergalactosaemia detected by mass screening. *J. Inherit. Metab. Dis.* 25: 71-76.
2. Fujisaki, S., et al. 2004. Analysis of a full-length cDNA library constructed from swine olfactory bulb for elucidation of expressed genes and their transcription initiation sites. *J. Vet. Med. Sci.* 66: 15-23.
3. Haitina, T., et al. 2006. Fourteen novel human members of mitochondrial solute carrier family 25 (SLC25) widely expressed in the central nervous system. *Genomics* 88: 779-790.
4. Nusbaum, R., et al. 2006-2007. Susceptibility to breast cancer: hereditary syndromes and low penetrance genes. *Breast Dis.* 27: 21-50.
5. Pang, E.Y., et al. 2007. Identification of PFTAIRE protein kinase 1, a novel cell division cycle-2 related gene, in the motile phenotype of hepatocellular carcinoma cells. *Hepatology* 46: 436-445.

## CHROMOSOMAL LOCATION

Genetic locus: SLC25A35 (human) mapping to 17p13.1; Slc25a35 (mouse) mapping to 11 B3.

## SOURCE

SLC25A35 (K-14) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of SLC25A35 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-244160 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

SLC25A35 (K-14) is recommended for detection of SLC25A35 of mouse, rat and 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).

SLC25A35 (K-14) is also recommended for detection of SLC25A35 in additional species, including bovine and porcine.

Suitable for use as control antibody for SLC25A35 siRNA (h): sc-94122, SLC25A35 siRNA (m): sc-153513, SLC25A35 shRNA Plasmid (h): sc-94122-SH, SLC25A35 shRNA Plasmid (m): sc-153513-SH, SLC25A35 shRNA (h) Lentiviral Particles: sc-94122-V and SLC25A35 shRNA (m) Lentiviral Particles: sc-153513-V.

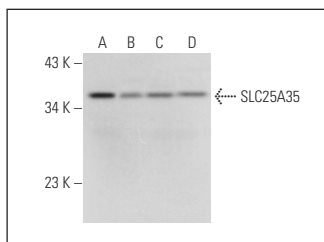
Molecular Weight of SLC25A35 isoforms: 32/31 kDa.

Positive Controls: HeLa whole cell lysate: sc-2200, K-562 whole cell lysate: sc-2203 or 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) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) 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.

## DATA



SLC25A35 (K-14): sc-244160. Western blot analysis of SLC25A35 expression in HeLa (A), Jurkat (B), K-562 (C) and Hep G2 (D) whole cell lysates.

## 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.