

SLC22A23 (P-14): sc-137761

BACKGROUND

SLC22A23 (solute carrier family 22 member 23), also known as C6orf85, is a 686 amino acid multi-pass membrane protein that belongs to the major facilitator (TC 2.A.1) superfamily and organic cation transporter (TC 2.A.1.19) family. SLC22A23 is a glycosylated protein that exists as four alternatively spliced isoforms. The gene encoding SLC22A23 maps to human chromosome 6, which contains around 1,200 genes within 170 million base pairs of sequence. Deletion of a portion of the q arm of chromosome 6 is associated with early onset intestinal cancer suggesting the presence of a cancer susceptibility locus. Porphyria cutanea tarda is associated with chromosome 6 through the HFE gene which, when mutated, predisposes an individual to developing this porphyria. Notably, the PARK2 gene, which is associated with Parkinson's disease, and the genes encoding the major histocompatibility complex proteins, which are key molecular components of the immune system and determine predisposition to rheumatic diseases, are also located on chromosome 6. Stickler syndrome, 21-hydroxylase deficiency and maple syrup urine disease are also associated with genes on chromosome 6. A bipolar disorder susceptibility locus has been identified on the q arm of chromosome 6.

REFERENCES

1. Brunner, H.G., et al. 1994. A Stickler syndrome gene is linked to chromosome 6 near the COL11A2 gene. *Hum. Mol. Genet.* 3: 1561-1564.
2. Cesari, R., et al. 2003. Parkin, a gene implicated in autosomal recessive juvenile parkinsonism, is a candidate tumor suppressor gene on chromosome 6q25-q27. *Proc. Natl. Acad. Sci. USA* 100: 5956-5961.
3. Jacobsson, J.A., et al. 2007. Identification of six putative human transporters with structural similarity to the drug transporter SLC22 family. *Genomics* 90: 595-609.
4. Bläker, H., et al. 2008. Recurrent deletions at 6q in early age of onset non-HNPCC- and non-FAP-associated intestinal carcinomas. Evidence for a novel cancer susceptibility locus at 6q14-q22. *Genes Chromosomes Cancer*. 47: 159-164.
5. Fan, J., et al. 2010. Linkage disequilibrium mapping of the chromosome 6q21-22.31 bipolar I disorder susceptibility locus. *Am. J. Med. Genet. B Neuropsychiatr. Genet.* 153B: 29-37.
6. Jalil, S., et al. 2010. Associations among behavior-related susceptibility factors in porphyria cutanea tarda. *Clin. Gastroenterol. Hepatol.* 8: 297-302, 302.e1.

CHROMOSOMAL LOCATION

Genetic locus: SLC22A23 (human) mapping to 6p25.2; Slc22a23 (mouse) mapping to 13 A3.3.

SOURCE

SLC22A23 (P-14) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the C-terminus of SLC22A23 of human origin.

RESEARCH USE

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

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-137761 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

SLC22A23 (P-14) is recommended for detection of SLC22A23 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 SLC22A family members.

SLC22A23 (P-14) is also recommended for detection of SLC22A23 in additional species, including equine and canine.

Suitable for use as control antibody for SLC22A23 siRNA (h): sc-95110, SLC22A23 siRNA (m): sc-153499, SLC22A23 shRNA Plasmid (h): sc-95110-SH, SLC22A23 shRNA Plasmid (m): sc-153499-SH, SLC22A23 shRNA (h) Lentiviral Particles: sc-95110-V and SLC22A23 shRNA (m) Lentiviral Particles: sc-153499-V.

Molecular Weight of SLC22A23: 74/45/38/35 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.

PROTOCOLS

See our web site at www.scbt.com or our catalog for detailed protocols and support products.