

# SLC6A15 (C-14): sc-169350

## BACKGROUND

SLC6A15 (solute carrier family 6 (neutral amino acid transporter), member 15), also known as sodium-dependent neutral amino acid transporter B(0)AT2, transporter v7-3, NTT73 or sodium-coupled branched-chain amino-acid transporter 1 (SBAT1), is a 730 amino acid multi-pass membrane protein that acts as a sodium-dependent neutral amino acid transporter. A member of the sodium neurotransmitter symporter (SNF) family and SLC6A15 subfamily, SLC6A15 differs from other members of its family in that it does not appear to be chloride-dependent. SLC6A15 is expressed in brain and is encoded by a gene that maps to human chromosome 12, which encodes over 1,100 genes and comprises approximately 4.5% of the human genome. Chromosome 12 is associated with a variety of diseases and afflictions, including hypochondrogenesis, achondrogenesis, Kniest dysplasia, Noonan syndrome and trisomy 12p, which causes facial developmental defects and seizure disorders.

## REFERENCES

- Allen, T.L., et al. 1996. Cytogenetic and molecular analysis in trisomy 12p. *Am. J. Med. Genet.* 63: 250-256.
- Farmer, M.K., et al. 2000. Cloning and characterization of human NTT5 and v7-3: two orphan transporters of the Na<sup>+</sup>/Cl<sup>-</sup> -dependent neurotransmitter transporter gene family. *Genomics* 70: 241-252.
- Delgado Carrasco, J., et al. 2001. Achondrogenesis type II-hypochondrogenesis: radiological features. *An. Esp. Pediatr.* 55: 553-557.
- Yokoyama, T., et al. 2003. A case of Kniest dysplasia with retinal detachment and the mutation analysis. *Am. J. Ophthalmol.* 136: 1186-1188.
- Takanaga, H., et al. 2005. Characterization of a branched-chain amino-acid transporter SBAT1 (SLC6A15) that is expressed in human brain. *Biochem. Biophys. Res. Commun.* 337: 892-900.

## CHROMOSOMAL LOCATION

Genetic locus: SLC6A15 (human) mapping to 12q21.31; Slc6a15 (mouse) mapping to 10 D1.

## SOURCE

SLC6A15 (C-14) is an affinity purified goat polyclonal antibody raised against a peptide mapping within a C-terminal cytoplasmic domain of SLC6A15 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-169350 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

SLC6A15 (C-14) is recommended for detection of SLC6A15 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); non cross-reactive with other SLC6A family members.

SLC6A15 (C-14) is also recommended for detection of SLC6A15 in additional species, including equine, canine, bovine, porcine and avian.

Suitable for use as control antibody for SLC6A15 siRNA (h): sc-95673, SLC6A15 siRNA (m): sc-153574, SLC6A15 shRNA Plasmid (h): sc-95673-SH, SLC6A15 shRNA Plasmid (m): sc-153574-SH, SLC6A15 shRNA (h) Lentiviral Particles: sc-95673-V and SLC6A15 shRNA (m) Lentiviral Particles: sc-153574-V.

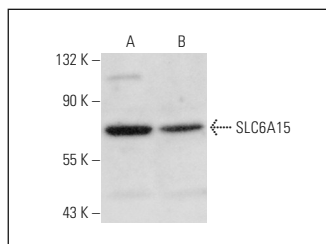
Molecular Weight of SLC6A15: 82 kDa.

Positive Controls: Jurkat whole cell lysate: sc-2204, RT-4 whole cell lysate: sc-364257 or SK-N-MC cell lysate: sc-2237.

## 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



SLC6A15 (C-14): sc-169350. Western blot analysis of SLC6A15 expression in SK-N-MC (A) and RT-4 (B) 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.