

# SLC17A4 (S-12): sc-132817

## BACKGROUND

SLC17A4 (solute carrier family 17 member 4), is a 497 amino acid multi-pass membrane protein that belongs to the sodium/anion cotransporter family of the major facilitator superfamily. Expressed in liver, small intestine, pancreas and colon, SLC17A4 is believed to be involved in active transport of phosphate into cells through a sodium/phosphate co-transport (NPT) system. SLC17A4 shares 54% sequence identity with SLC17A2 (also known as NPT3), 43.5% sequence identity with SLC17A3 (also known as NPT4) and 48% sequence identity with NPT1 (also known as SLC17A1). Due to alternative splicing events, two SLC17A2 isoforms exist.

## REFERENCES

1. Shibui, A., Tsunoda, T., Seki, N., Suzuki, Y., Sugane, K. and Sugano, S. 1999. Isolation and chromosomal mapping of a novel human gene showing homology to Na<sup>+</sup>/PO<sub>4</sub> cotransporter. *J. Hum. Genet.* 44: 190-192.
2. Ponsuksili, S., Wimmers, K., Yerle, M. and Schellander, K. 2001. Mapping of 93 porcine ESTs preferentially expressed in liver. *Mamm. Genome* 12: 869-872.
3. Online Mendelian Inheritance in Man, OMIM<sup>™</sup>. 2002. Johns Hopkins University, Baltimore, MD. MIM Number: 604216. World Wide Web URL: <http://www.ncbi.nlm.nih.gov/omim/>
4. Elmariah, S. and Gunn, R.B. 2003. Kinetic evidence that the Na-PO<sub>4</sub> cotransporter is the molecular mechanism for Na/Li exchange in human red blood cells. *Am. J. Physiol., Cell Physiol.* 285: C446-C456.
5. Reimer, R.J. and Edwards, R.H. 2004. Organic anion transport is the primary function of the SLC17/type I phosphate transporter family. *Pflugers Arch.* 447: 629-635.

## CHROMOSOMAL LOCATION

Genetic locus: SLC17A4 (human) mapping to 6p22.2.

## SOURCE

SLC17A4 (S-12) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the N-terminus of SLC17A4 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-132817 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.

## PROTOCOLS

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

## APPLICATIONS

SLC17A4 (S-12) is recommended for detection of SLC17A4 isoforms 1 and 2 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 SLC17A2 or SLC17A3.

Suitable for use as control antibody for SLC17A4 siRNA (h): sc-95575, SLC17A4 shRNA Plasmid (h): sc-95575-SH and SLC17A4 shRNA (h) Lentiviral Particles: sc-95575-V.

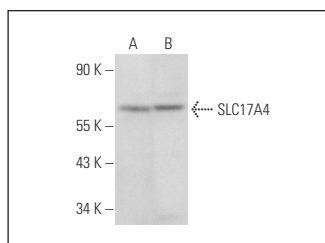
Molecular Weight of SLC17A4: 54 kDa.

Positive Controls: Hep G2 cell lysate: sc-2227, Jurkat whole cell lysate: sc-2204 or K-562 whole cell lysate: sc-2203.

## 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<sup>™</sup> compatible donkey anti-goat IgG-HRP: sc-2033 (dilution range: 1:2000-1:5000), Cruz Marker<sup>™</sup> 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<sup>™</sup> Mounting Medium: sc-24941.

## DATA



SLC17A4 (S-12): sc-132817. Western blot analysis of SLC17A4 expression in K-562 (A) and Hep G2 (B) whole cell lysates.

## RESEARCH USE

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