

# SLC17A4 (P-13): sc-132815

## 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 cotransport (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., et al. 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., et al. 2001. Mapping of 93 porcine ESTs preferentially expressed in liver. *Mamm. Genome* 12: 869-872.
3. Online Mendelian Inheritance in Man, OMIM™. 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 (mouse) mapping to 13 A3.1.

## SOURCE

SLC17A4 (P-13) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of SLC17A4 of mouse 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-132815 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 (P-13) is recommended for detection of SLC17A4 of mouse and rat 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), immunohistochemistry (including paraffin-embedded sections) (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.

SLC17A4 (P-13) is also recommended for detection of SLC17A4 in additional species, including equine.

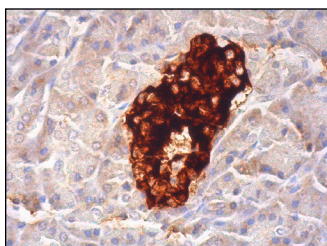
Suitable for use as control antibody for SLC17A4 siRNA (m): sc-153496, SLC17A4 shRNA Plasmid (m): sc-153496-SH and SLC17A4 shRNA (m) Lentiviral Particles: sc-153496-V.

Molecular Weight of SLC17A4: 54 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. 3) Immunohistochemistry: use ImmunoCruz™: sc-2053 or ABC: sc-2023 goat IgG Staining Systems.

## DATA



SLC17A4 (P-13): sc-132815. Immunoperoxidase staining of formalin fixed, paraffin-embedded human pancreas tissue showing cytoplasmic staining of islets of Langerhans cells.

## RESEARCH USE

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