

SLC17A4 (NQ-C19): sc-135562

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⁺/PO₄ 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-PO₄ cotransporter is the molecular mechanism for Na/Li exchange in human red blood cells. *Am. J. Physiol., Cell Physiol.* 285: C446-C456.

CHROMOSOMAL LOCATION

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

SOURCE

SLC17A4 (NQ-C19) is a mouse monoclonal antibody raised against recombinant SLC17A4 protein of human origin.

PRODUCT

Each vial contains 100 µg IgG₁ kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

APPLICATIONS

SLC17A4 (NQ-C19) is recommended for detection of SLC17A4 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)] and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

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.

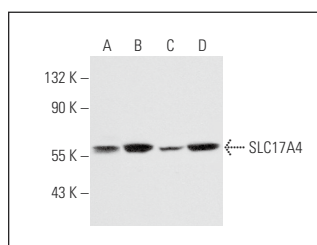
Molecular Weight of SLC17A4: 54 kDa.

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

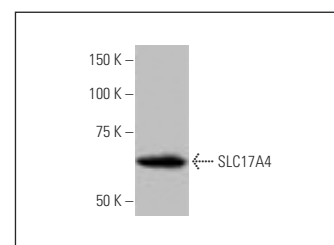
RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended: 1) Western Blotting: use m-IgGκ BP-HRP: sc-516102 or m-IgGκ BP-HRP (Cruz Marker): sc-516102-CM (dilution range: 1:1000-1:10000), Cruz Marker™ Molecular Weight Standards: sc-2035, UltraCruz® Blocking Reagent: sc-516214 and Western Blotting Luminol Reagent: sc-2048. 2) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml).

DATA



SLC17A4 (NQ-C19): sc-135562. Western blot analysis of SLC17A4 expression in Jurkat (A), Hep G2 (B), MCF7 (C) and SK-N-MC (D) whole cell lysates.



SLC17A4 (NQ-C19): sc-135562. Western blot analysis of SLC17A4 expression in K-562 whole cell lysate.

STORAGE

Store at 4° C, **DO NOT FREEZE**. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

RESEARCH USE

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

PROTOCOLS

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