

SLC17A9 (N-12): sc-86311

BACKGROUND

SLC17A9 (solute carrier family 17 member 9) is a 436 amino acid multi-pass membrane protein that belongs to the major facilitator superfamily and the Sodium/anion cotransporter family. The SLC17A9 protein has 12 transmembrane domains and is predominantly expressed in adrenal gland, brain and thyroid. Involved in vesicular storage and exocytosis of ATP, SLC17A9 may accumulate ATP and other nucleotides in secretory vesicles such as adrenal chromaffin granules and synaptic vesicles. The SLC17A9 protein also acts as a VNUT, which is involved in ATP storage and release. The SLC17A9 gene contains 14 exons and spans about 13 kb. Existing as three alternatively spliced isoforms, the SLC17A9 gene is conserved in chimpanzee, canine, bovine, mouse, rat, chicken, zebrafish, fruit fly, mosquito and *C.elegans*, and maps to human chromosome 20q13.33. Representing about 2% of human DNA, chromosome 20 consists of approximately 63 million bases and 600 genes.

REFERENCES

1. Deloukas, P., Matthews, L.H., Ashurst, J., Burton, J., Gilbert, J.G., Jones, M., et al. 2001. The DNA sequence and comparative analysis of human chromosome 20. *Nature* 414: 865-871.
2. Ville, D., Kaminska, A., Bahi-Buisson, N., Biraben, A., Plouin, P., Telvi, L., Dulac, O. and Chiron, C. 2006. Early pattern of epilepsy in the ring chromosome 20 syndrome. *Epilepsia* 47: 543-549.
3. Joó, J.G., Beke, A., Tóth-Pál, E., Hargitai, B., Szigeti, Z., Papp, C. and Papp, Z. 2006. Trisomy 20 mosaicism and nonmosaic trisomy 20: a report of 2 cases. *J. Reprod. Med.* 51: 209-212.
4. Lundwall, A. 2007. A locus on chromosome 20 encompassing genes that are highly expressed in the epididymis. *Asian J. Androl.* 9: 540-544.
5. Sawada, K., Echigo, N., Juge, N., Miyaji, T., Otsuka, M., Omote, H., Yamamoto, A. and Moriyama, Y. 2008. Identification of a vesicular nucleotide transporter. *Proc. Natl. Acad. Sci. USA* 105: 5683-5686.
6. Online Mendelian Inheritance in Man, OMIM[™]. 2008. Johns Hopkins University, Baltimore, MD. MIM Number: 612107. World Wide Web URL: <http://www.ncbi.nlm.nih.gov/omim/>
7. Tokunaga, A., Tsukimoto, M., Harada, H., Moriyama, Y. and Kojima, S. 2010. Involvement of SLC17A9-dependent vesicular exocytosis in the mechanism of ATP release during T cell activation. *J. Biol. Chem.* 285: 17406-17416.

CHROMOSOMAL LOCATION

Genetic locus: SLC17A9 (human) mapping to 20q13.33; Slc17a9 (mouse) mapping to 2 H4.

SOURCE

SLC17A9 (N-12) is an affinity purified rabbit polyclonal antibody raised against a peptide mapping near the N-terminus of SLC17A9 of human origin.

RESEARCH USE

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

PRODUCT

Each vial contains 100 µg IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-86311 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

SLC17A9 (N-12) is recommended for detection of SLC17A9 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).

SLC17A9 (N-12) is also recommended for detection of SLC17A9 in additional species, including equine.

Suitable for use as control antibody for SLC17A9 siRNA (h): sc-72740, SLC17A9 siRNA (m): sc-141874, SLC17A9 shRNA Plasmid (h): sc-72740-SH, SLC17A9 shRNA Plasmid (m): sc-141874-SH, SLC17A9 shRNA (h) Lentiviral Particles: sc-72740-V and SLC17A9 shRNA (m) Lentiviral Particles: sc-141874-V.

Molecular Weight of SLC17A9: 47/24 kDa.

RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use goat anti-rabbit IgG-HRP: sc-2004 (dilution range: 1:2000-1:100,000) or Cruz Marker[™] compatible goat anti-rabbit IgG-HRP: sc-2030 (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 goat anti-rabbit IgG-FITC: sc-2012 (dilution range: 1:100-1:400) or goat anti-rabbit IgG-TR: sc-2780 (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.