

SLC25A11 (T-13): sc-160804

BACKGROUND

Inner membrane mitochondrial proteins are responsible for the transport of metabolites across the mitochondrial membrane. SLC25A11 (solute carrier family 25 member 11), also known as Mitochondrial 2-oxoglutarate/malate carrier protein, is a 314 amino acid multi-pass transmembrane protein belonging to the mitochondrial carrier protein family. As an oxoglutarate/malate carrier, SLC25A11 transports 2-oxoglutarate across the inner mitochondrial membrane in an electroneutral exchange for dicarboxylic acids and malate. SLC25A11 also participates in other important metabolic processes, such as the oxoglutarate/isocitrate shuttle and the malate-aspartate shuttle, as well as in nitrogen metabolism and in gluconeogenesis from lactate. SLC25A11 contains 3 solcar repeats, which is typical of substrate carrier proteins involved in energy transfer.

REFERENCES

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2. Iacobazzi, V., et al. 1992. Sequences of the human and bovine genes for the mitochondrial 2-oxoglutarate carrier. *DNA Seq.* 3: 79-88.
3. Kuan, J., et al. 1993. The mitochondrial carrier family of transport proteins: structural, functional, and evolutionary relationships. *Crit. Rev. Biochem. Mol. Biol.* 28: 209-233.
4. Piccininni, S., et al. 1998. Assignment of the oxoglutarate carrier gene (SLC20A4) to human chromosome 17p13.3. *Cytogenet. Cell Genet.* 83: 256-257.
5. Online Mendelian Inheritance in Man, OMIM™. 2002. Johns Hopkins University, Baltimore, MD. MIM Number: 604165. World Wide Web URL: <http://www.ncbi.nlm.nih.gov/omim/>
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CHROMOSOMAL LOCATION

Genetic locus: SLC25A11 (human) mapping to 17p13.2; Slc25a11 (mouse) mapping to 11 B3.

SOURCE

SLC25A11 (T-13) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of SLC25A11 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-160804 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

SLC25A11 (T-13) is recommended for detection of SLC25A11 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 SLC25A family members.

SLC25A11 (T-13) is also recommended for detection of SLC25A11 in additional species, including equine.

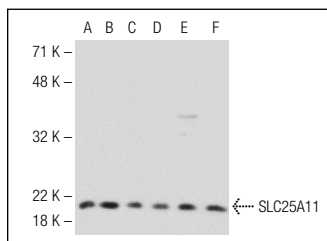
Suitable for use as control antibody for SLC25A11 siRNA (h): sc-94049, SLC25A11 siRNA (m): sc-153500, SLC25A11 shRNA Plasmid (h): sc-94049-SH, SLC25A11 shRNA Plasmid (m): sc-153500-SH, SLC25A11 shRNA (h) Lentiviral Particles: sc-94049-V and SLC25A11 shRNA (m) Lentiviral Particles: sc-153500-V.

Molecular Weight (predicted) of SLC25A11: 34 kDa.

Molecular Weight (observed) of SLC25A11: 20 kDa.

Positive Controls: HeLa whole cell lysate: sc-2200, Jurkat whole cell lysate: sc-2204 or Sol8 cell lysate: sc-2249.

DATA



SLC25A11 (T-13): sc-160804. Western blot analysis of SLC25A11 expression in HeLa (A), Jurkat (B), Ramos (C), Hep G2 (D), ES-2 (E) and Sol8 (F) whole cell lysates.

RESEARCH USE

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

PROTOCOLS

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



Try **SLC25A11 (E-2): sc-515593** or **SLC25A11 (AP9): sc-130418**, our highly recommended monoclonal alternatives to SLC25A11 (T-13).