

SLC25A45 (C-6): sc-514755

BACKGROUND

SLC25A45 (solute carrier family 25 member 45) is a 288 amino acid multi-pass membrane protein that belongs to the the SLC25 family of mitochondrial carriers that are responsible for transporting metabolites across the inner mitochondrial membrane. Expressed in a variety of tissues, SLC25A45 contains three Solcar repeats and localizes to the mitochondrion inner membrane. Due to alternative splicing events, four known isoforms exist for SLC25A45. The human gene encoding SLC25A45 localizes to chromosome 11. With approximately 135 million base pairs and 1,400 genes, chromosome 11 makes up around 4% of human genomic DNA and is considered a gene and disease association dense chromosome. Wilms' tumors, WAGR syndrome and Denys-Drash syndrome are associated with mutations of the WT1 gene located on chromosome 11. Other disorders associated with defects in chromosome 11 include Jervell and Lange-Nielsen syndrome, Jacobsen syndrome, Niemann-Pick disease, hereditary angioedema and Smith-Lemli-Opitz syndrome.

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: SLC25A45 (human) mapping to 11q13.1; Slc25a45 (mouse) mapping to 19 A.

SOURCE

SLC25A45 (C-6) is a mouse monoclonal antibody specific for an epitope mapping between amino acids 187-201 within an internal region of SLC25A45 of human origin.

STORAGE

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

PRODUCT

Each vial contains 200 μ g IgM kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-514755 P, (100 μ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% stabilizer protein).

APPLICATIONS

SLC25A45 (C-6) is recommended for detection of SLC25A45 isoforms 1-4 of mouse, rat and human origin by Western Blotting (starting dilution 1:100, dilution range 1:100-1:1000), immunoprecipitation [1-2 μ g per 100-500 μ g 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).

Suitable for use as control antibody for SLC25A45 siRNA (h): sc-96323, SLC25A45 siRNA (m): sc-153521, SLC25A45 shRNA Plasmid (h): sc-96323-SH, SLC25A45 shRNA Plasmid (m): sc-153521-SH, SLC25A45 shRNA (h) Lentiviral Particles: sc-96323-V and SLC25A45 shRNA (m) Lentiviral Particles: sc-153521-V.

Molecular Weight of SLC25A45 isoform 1/2/3/4: 32/27/21/30 kDa.

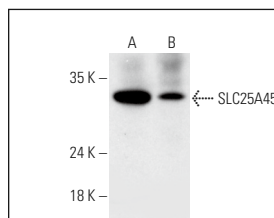
Positive Controls: NCI-H460 whole cell lysate: sc-364235, RAW 264.7 whole cell lysate: sc-2211 or MIA PaCa-2 cell lysate: sc-2285.

RECOMMENDED SUPPORT REAGENTS

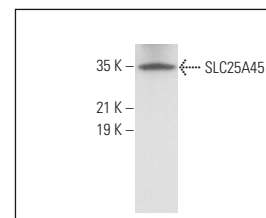
To ensure optimal results, the following support reagents are recommended:

1) Western Blotting: use m-IgG κ BP-HRP: sc-516102 or m-IgG κ 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 L-Agarose: sc-2336 (0.5 ml agarose/2.0 ml). 3) Immunofluorescence: use m-IgG κ BP-FITC: sc-516140 or m-IgG κ BP-PE: sc-516141 (dilution range: 1:50-1:200) with UltraCruz® Mounting Medium: sc-24941 or UltraCruz® Hard-set Mounting Medium: sc-359850.

DATA



SLC25A45 (C-6): sc-514755. Western blot analysis of SLC25A45 expression in NCI-H460 (A) and MIA PaCa-2 (B) whole cell lysates.



SLC25A45 (C-6): sc-514755. Western blot analysis of SLC25A45 expression in RAW 264.7 whole cell lysate.

RESEARCH USE

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