

KMCP1 (C-7): sc-398835

BACKGROUND

Members of the mitochondrial carrier family transport a variety of metabolites across the inner mitochondrial membrane. Kidney mitochondrial carrier protein-1 (KMCP1), also designated solute carrier family 25 member 30 (SLC25A30), is a multi-pass membrane protein that localizes to the mitochondria and is highly expressed in kidney cortex. It is important during increased mitochondrial metabolism and is up-regulated in response to cellular oxidative damage. KMCP1 is highly homologous to brain mitochondrial carrier protein-1 (BMCP1), a multi-pass membrane protein that is mainly expressed in brain with some expression in testis. BMCP1 facilitates mitochondrial proton leak and localizes to the mitochondrial inner membrane.

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: SLC25A30 (human) mapping to 13q14.13; Slc25a30 (mouse) mapping to 14 D3.

SOURCE

KMCP1 (C-7) is a mouse monoclonal antibody specific for an epitope mapping between amino acids 224-248 near the C-terminus of KMCP1 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 µg 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-398835 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% stabilizer protein).

APPLICATIONS

KMCP1 (C-7) is recommended for detection of KMCP1 of mouse, rat and human origin by Western Blotting (starting dilution 1:100, 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).

Suitable for use as control antibody for KMCP1 siRNA (h): sc-60897, KMCP1 siRNA (m): sc-60898, KMCP1 shRNA Plasmid (h): sc-60897-SH, KMCP1 shRNA Plasmid (m): sc-60898-SH, KMCP1 shRNA (h) Lentiviral Particles: sc-60897-V and KMCP1 shRNA (m) Lentiviral Particles: sc-60898-V.

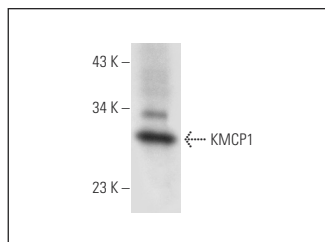
Molecular Weight of KMCP1: 32 kDa.

Positive Controls: human skeletal muscle extract: sc-363776.

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 L-Agarose: sc-2336 (0.5 ml agarose/2.0 ml). 3) Immunofluorescence: use m-IgGκ BP-FITC: sc-516140 or m-IgGκ 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



KMCP1 (C-7): sc-398835. Western blot analysis of KMCP1 expression in human skeletal muscle tissue extract.

RESEARCH USE

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