

# KMCP1 (Q-20): sc-50944

## 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 upregulated 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 (Q-20) is an affinity purified goat polyclonal antibody raised against a peptide mapping 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 IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-50944 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

## APPLICATIONS

KMCP1 (Q-20) is recommended for detection of KMCP1 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).

KMCP1 (Q-20) is also recommended for detection of KMCP1 in additional species, including equine and canine.

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.

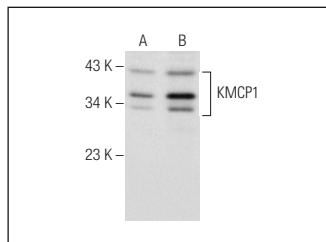
Molecular Weight of KMCP1: 32 kDa.

Positive Controls: KMCP1 (h): 293T Lysate: sc-373020.

## RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use donkey anti-goat IgG-HRP: sc-2020 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible donkey anti-goat IgG-HRP: sc-2033 (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) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) Immunofluorescence: use donkey anti-goat IgG-FITC: sc-2024 (dilution range: 1:100-1:400) or donkey anti-goat IgG-TR: sc-2783 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

## DATA



KMCP1 (Q-20): sc-50944. Western blot analysis of KMCP1 expression in non-transfected: sc-117752 (A) and human KMCP1 transfected: sc-373020 (B) 293T whole cell lysates.

## RESEARCH USE

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