

MPV17L (E-12): sc-136754

BACKGROUND

MPV17L (MPV17 mitochondrial membrane protein-like), also known as MLP1, MLP2 or MPV17L1, is a 196 amino acid multi-pass membrane protein belonging to the peroxisomal membrane protein PXMP2/4 family. M-LPS (also known as M-LPH1) and M-LPL (also known as M-LPH2) are alternatively spliced isoforms of MPV17L and are ubiquitously expressed in human tissues, however only M-LPS exists at the protein level and mainly resides in kidney. MPV17L may be involved in protecting against mitochondrial oxidative stress and apoptosis, and participates in reactive oxygen species (ROS) metabolism by up- or down-regulating genes of antioxidant enzymes. MPV17L may play a role in the development of early-onset glomerulosclerosis, which is the hardening or formation of scar tissue of the glomerulus in the kidney. The gene encoding MPV17L maps to human chromosome 16p13.11.

REFERENCES

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3. Schrader, M. and Fahimi, H.D. 2004. Mammalian peroxisomes and reactive oxygen species. *Histochem. Cell Biol.* 122: 383-393.
4. Iida, R., et al. 2005. A novel alternative spliced Mpv17-like protein isoform localizes in cytosol and is expressed in a kidney- and adult-specific manner. *Exp. Cell Res.* 302: 22-30.
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7. Wong, L.J., et al. 2007. Mutations in the MPV17 gene are responsible for rapidly progressive liver failure in infancy. *Hepatology* 46: 1218-1227.
8. Krick, S., et al. 2008. MPV17L protects against mitochondrial oxidative stress and apoptosis by activation of Omi/HtrA2 protease. *Proc. Natl. Acad. Sci. USA* 105: 14106-14111.
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CHROMOSOMAL LOCATION

Genetic locus: MPV17L (human) mapping to 16p13.11; Mpv17l (mouse) mapping to 16 A1.

SOURCE

MPV17L (E-12) is an affinity purified goat polyclonal antibody raised against a peptide mapping within a cytoplasmic domain of MPV17L 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-136754 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

MPV17L (E-12) is recommended for detection of MPV17L isoforms 1 and 2 of mouse 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 MPV17.

MPV17L (E-12) is also recommended for detection of MPV17L isoforms 1 and 2 in additional species, including bovine.

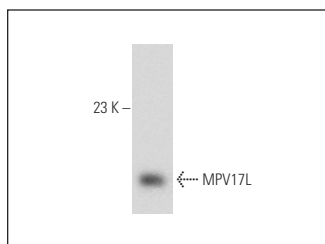
Suitable for use as control antibody for MPV17L siRNA (h): sc-93329, MPV17L siRNA (m): sc-149544, MPV17L shRNA Plasmid (h): sc-93329-SH, MPV17L shRNA Plasmid (m): sc-149544-SH, MPV17L shRNA (h) Lentiviral Particles: sc-93329-V and MPV17L shRNA (m) Lentiviral Particles: sc-149544-V.

Molecular Weight of M-LPS: 20 kDa.

Molecular Weight of M-LPL: 10 kDa.

Positive Controls: Caki-1 cell lysate: sc-2224.

DATA



MPV17L (E-12): sc-136754. Western blot analysis of MPV17L expression in Caki-1 whole cell lysate.

STORAGE

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

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.