

MPP2 (K-16): sc-160534

BACKGROUND

The MAGUK (membrane-associated guanylate kinase homologs) family of proteins contain multiple protein-binding domains and are involved in cell junction organization, tumor suppression, and signaling. The MAGUK family is divided into four subfamilies: DLG-like, ZO1-like, p55-like and LIN2-like. MPP2 (membrane protein, palmitoylated 2), also known as MAGUK p55 subfamily member 2, discs large homolog 2 or DLG2, is a 576 amino acid protein belonging to the MAGUK family that exists as 3 alternatively spliced isoforms. MPP2 contains one guanylate kinase-like domain, a PDZ (DHR) domain, two L27 domains and a single SH3 domain. The gene encoding MPP2 maps to the same segment of human chromosome 17 as MPP3, with whom MPP2 likely shares similar function and common structural organization.

REFERENCES

1. Mazoyer, S., Gayther, S.A., Nagai, M.A., Smith, S.A., Dunning, A., van Rensburg, E.J., Albertsen, H., White, R. and Ponder, B.A. 1995. A gene (DLG2) located at 17q12-q21 encodes a new homologue of the *Drosophila* tumor suppressor dlg-A. *Genomics* 28: 25-31.
2. Smith, S.A., Holik, P., Stevens, J., Mazoyer, S., Melis, R., Williams, B., White, R. and Albertsen, H. 1996. Isolation of a gene (DLG3) encoding a second member of the discs-large family on chromosome 17q12-q21. *Genomics* 31: 145-150.
3. Katoh, M. and Katoh, M. 2004. Identification and characterization of human MPP7 gene and mouse Mpp7 gene in silico. *Int. J. Mol. Med.* 13: 333-338.
4. Godreau, D., Neyroud, N., Vranckx, R. and Hatem, S. 2004. MAGUKs: beyond ionic channel anchoring. *Med. Sci.* 20: 84-88.

CHROMOSOMAL LOCATION

Genetic locus: MPP2 (human) mapping to 17q21.31; Mpp2 (mouse) mapping to 11 D.

SOURCE

MPP2 (K-16) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of MPP2 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-160534 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.

PROTOCOLS

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

APPLICATIONS

MPP2 (K-16) is recommended for detection of MPP2 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 MPP family members.

MPP2 (K-16) is also recommended for detection of MPP2 in additional species, including equine, canine, bovine and porcine.

Suitable for use as control antibody for MPP2 siRNA (h): sc-93779, MPP2 siRNA (m): sc-149535, MPP2 shRNA Plasmid (h): sc-93779-SH, MPP2 shRNA Plasmid (m): sc-149535-SH, MPP2 shRNA (h) Lentiviral Particles: sc-93779-V and MPP2 shRNA (m) Lentiviral Particles: sc-149535-V.

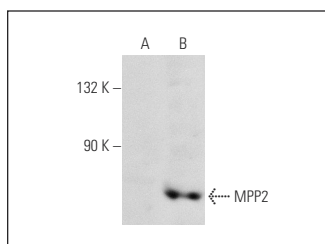
Molecular Weight of MPP2: 65 kDa.

Positive Controls: MPP2 (h3): 293T Lysate: sc-172797.

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



MPP2 (K-16): sc-160534. Western blot analysis of MPP2 expression in non-transfected: sc-117752 (A) and human MPP2 transfected: sc-172797 (B) 293T whole cell lysates.

RESEARCH USE

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

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Try **MPP2 (D-9): sc-376913** or **MPP2 (A-7): sc-398939**, our highly recommended monoclonal alternatives to MPP2 (K-16).