

MPP2 (D-9): sc-376913

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 three 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

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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.
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CHROMOSOMAL LOCATION

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

SOURCE

MPP2 (D-9) is a mouse monoclonal antibody specific for an epitope mapping between amino acids 311-345 within an internal region of MPP2 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_{2b} in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

MPP2 (D-9) is available conjugated to agarose (sc-376913 AC), 500 µg/0.25 ml agarose in 1 ml, for IP; to HRP (sc-376913 HRP), 200 µg/ml, for WB, IHC(P) and ELISA; to either phycoerythrin (sc-376913 PE), fluorescein (sc-376913 FITC), Alexa Fluor[®] 488 (sc-376913 AF488), Alexa Fluor[®] 546 (sc-376913 AF546), Alexa Fluor[®] 594 (sc-376913 AF594) or Alexa Fluor[®] 647 (sc-376913 AF647), 200 µg/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor[®] 680 (sc-376913 AF680) or Alexa Fluor[®] 790 (sc-376913 AF790), 200 µg/ml, for Near-Infrared (NIR) WB, IF and FCM.

Blocking peptide available for competition studies, sc-376913 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% stabilizer protein).

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APPLICATIONS

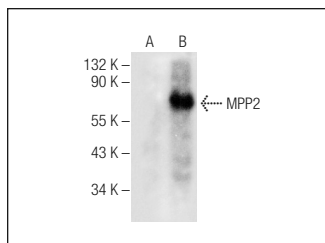
MPP2 (D-9) is recommended for detection of MPP2 of mouse, rat and human origin by Western Blotting (starting dilution 1:100, dilution range 1:100-1:1000), immunoprecipitation [1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500), immunohistochemistry (including paraffin-embedded sections) (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 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.

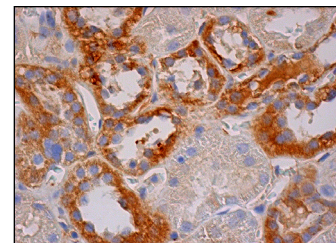
Molecular Weight of MPP2: 65 kDa.

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

DATA



MPP2 (D-9): sc-376913. Western blot analysis of MPP2 expression in non-transfected: sc-117752 (A) and human MPP2 transfected: sc-172797 (B) 293T whole cell lysates.



MPP2 (D-9): sc-376913. Immunoperoxidase staining of formalin fixed, paraffin-embedded human kidney tissue showing cytoplasmic staining of cells in tubules.

RESEARCH USE

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