

# MPP2 (T-12): sc-160535

## 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 (T-12) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the C-terminus 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-160535 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](http://www.scbt.com) or our catalog for detailed protocols and support products.

## APPLICATIONS

MPP2 (T-12) 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.

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.

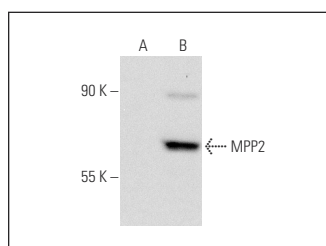
Molecular Weight of MPP2: 65 kDa.

Positive Controls: MPP2 (h3): 293T Lysate: sc-172797 or mouse heart extract: sc-2254.

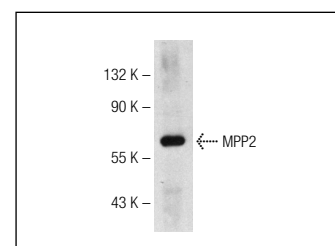
## RECOMMENDED SECONDARY REAGENTS

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 (T-12): sc-160535. Western blot analysis of MPP2 expression in non-transfected: sc-117752 (A) and human MPP2 transfected: sc-172797 (B) 293T whole cell lysates.



MPP2 (T-12): sc-160535. Western blot analysis of MPP2 expression in mouse heart tissue extract.

## 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 (T-12).