# MPP2 (h3): 293T Lysate: sc-172797



The Power to Question

# **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, Z01-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 MMP2 likely shares similar function and common structural organization.

## **REFERENCES**

- 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.
- 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.
- 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.
- Godreau, D., Neyroud, N., Vranckx, R. and Hatem, S. 2004. MAGUKs: beyond ionic channel anchoring. Med. Sci. 20: 84-88.
- 5. Online Mendelian Inheritance in Man, OMIM™. 2007. Johns Hopkins University, Baltimore, MD. MIM Number: 600723. World Wide Web URL: http://www.ncbi.nlm.nih.gov/omim/
- Baumgartner, M., Weiss, A., Fritzius, T., Heinrich, J. and Moelling, K. 2009. The PDZ protein MPP2 interacts with c-Src in epithelial cells. Exp. Cell Res. 315: 2888-2898.

# **CHROMOSOMAL LOCATION**

Genetic locus: MPP2 (human) mapping to 17q21.31.

# **PRODUCT**

MPP2 (h3): 293T Lysate represents a lysate of human MPP2 transfected 293T cells and is provided as 100  $\mu$ g protein in 200  $\mu$ l SDS-PAGE buffer.

#### **APPLICATIONS**

MPP2 (h3): 293T Lysate is suitable as a Western Blotting positive control for human reactive MPP2 antibodies. Recommended use: 10-20 µl per lane.

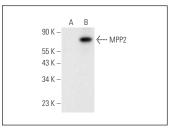
Control 293T Lysate: sc-117752 is available as a Western Blotting negative control lysate derived from non-transfected 293T cells.

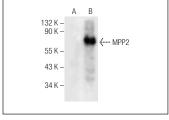
MPP2 (A-7): sc-398939 is recommended as a positive control antibody for Western Blot analysis of enhanced human MPP2 expression in MPP2 transfected 293T cells (starting dilution 1:100, dilution range 1:100-1:1,000).

# **RECOMMENDED SUPPORT REAGENTS**

To ensure optimal results, the following support reagents are recommended: 1) Western Blotting: use m-lgG $\kappa$  BP-HRP: sc-516102 or m-lgG $\kappa$  BP-HRP (Cruz Marker): sc-516102-CM (dilution range: 1:1000-1:10000), Cruz Marker<sup>TM</sup> Molecular Weight Standards: sc-2035, UltraCruz® Blocking Reagent: sc-516214 and Western Blotting Luminol Reagent: sc-2048.

#### **DATA**





MPP2 (A-7): sc-398939. 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. Western blot analysis of MPP2 expression in non-transfected: sc-117752 (A) and human MPP2 transfected: sc-172797 (B) 293T whole cell lysates.

#### **STORAGE**

Store at -20° C. Repeated freezing and thawing should be minimized. Sample vial should be boiled once prior to use. 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 for detailed protocols and support products.