

# MPHOSPH6 (D-3): sc-393429

## BACKGROUND

Progression of cells from interphase to mitosis involves alterations in cell structures and activities. The transition from G<sub>2</sub> to M phase is induced by M phase-promoting factor (MPF). In M phase, many proteins are phosphorylated directly by MPF or indirectly by kinases activated by MPF. These M phase phosphoproteins (MPPs), also known as MPHOSPHs, permit disassembly of interphase structures and generation of M phase enzymatic activities and structures. MPP6 (M phase phosphoprotein 6) is a 160 amino acid protein encoded by the human gene MPHOSPH6. MPP6, a member of the MPP family, contains one nuclear localization signal motif.

## REFERENCES

1. Matsumoto-Taniura, N., et al. 1996. Identification of novel M phase phosphoproteins by expression cloning. *Mol. Biol. Cell* 7: 1455-1469.
2. Chen, C.Y., et al. 2001. AU binding proteins recruit the exosome to degrade ARE-containing mRNAs. *Cell* 107: 451-464.
3. Leonoudakis, D., et al. 2004. Protein trafficking and anchoring complexes revealed by proteomic analysis of inward rectifier potassium channel (Kir2.x)-associated proteins. *J. Biol. Chem.* 279: 22331-22346.
4. Lehner, B. and Sanderson, C.M. 2004. A protein interaction framework for human mRNA degradation. *Genome Res.* 14: 1315-1323.
5. Schilders, G., et al. 2005. MPP6 is an exosome-associated RNA-binding protein involved in 5.8S rRNA maturation. *Nucleic Acids Res.* 33: 6795-6804.
6. Schilders, G., et al. 2007. C1D and hMtr4p associate with the human exosome subunit PM/Scf-100 and are involved in pre-rRNA processing. *Nucleic Acids Res.* 35: 2564-2572.

## CHROMOSOMAL LOCATION

Genetic locus: MPHOSPH6 (human) mapping to 16q23.3; Mphosph6 (mouse) mapping to 8 E1.

## SOURCE

MPHOSPH6 (D-3) is a mouse monoclonal antibody raised against amino acids 39-129 mapping within an internal region of MPHOSPH6 of human origin.

## PRODUCT

Each vial contains 200 µg IgG<sub>1</sub> kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

MPHOSPH6 (D-3) is available conjugated to agarose (sc-393429 AC), 500 µg/0.25 ml agarose in 1 ml, for IP; to HRP (sc-393429 HRP), 200 µg/ml, for WB, IHC(P) and ELISA; to either phycoerythrin (sc-393429 PE), fluorescein (sc-393429 FITC), Alexa Fluor® 488 (sc-393429 AF488), Alexa Fluor® 546 (sc-393429 AF546), Alexa Fluor® 594 (sc-393429 AF594) or Alexa Fluor® 647 (sc-393429 AF647), 200 µg/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor® 680 (sc-393429 AF680) or Alexa Fluor® 790 (sc-393429 AF790), 200 µg/ml, for Near-Infrared (NIR) WB, IF and FCM.

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## APPLICATIONS

MPHOSPH6 (D-3) is recommended for detection of MPHOSPH6 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 MPHOSPH6 siRNA (h): sc-62635, MPHOSPH6 siRNA (m): sc-62636, MPHOSPH6 shRNA Plasmid (h): sc-62635-SH, MPHOSPH6 shRNA Plasmid (m): sc-62636-SH, MPHOSPH6 shRNA (h) Lentiviral Particles: sc-62635-V and MPHOSPH6 shRNA (m) Lentiviral Particles: sc-62636-V.

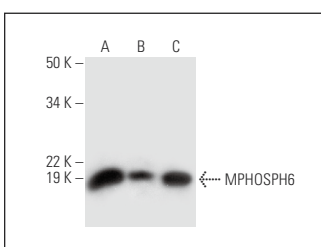
Molecular Weight of MPHOSPH6: 19 kDa.

Positive Controls: HeLa whole cell lysate: sc-2200, A-431 whole cell lysate: sc-2201 or KNRK whole cell lysate: sc-2214.

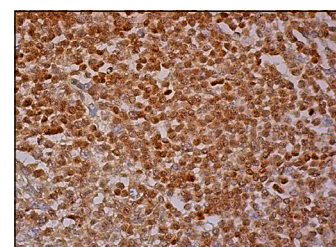
## RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended: 1) Western Blotting: use m-IgGκ BP-HRP: sc-516102 or m-IgGκ BP-HRP (Cruz Marker): sc-516102-CM (dilution range: 1:1000-1:10000), Cruz Marker™ Molecular Weight Standards: sc-2035, UltraCruz® Blocking Reagent: sc-516214 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 m-IgGκ BP-FITC: sc-516140 or m-IgGκ BP-PE: sc-516141 (dilution range: 1:50-1:200) with UltraCruz® Mounting Medium: sc-24941 or UltraCruz® Hard-set Mounting Medium: sc-359850. 4) Immunohistochemistry: use m-IgGκ BP-HRP: sc-516102 with DAB, 50X: sc-24982 and Immunohistomount: sc-45086, or Organo/Limonene Mount: sc-45087.

## DATA



MPHOSPH6 (D-3): sc-393429. Western blot analysis of MPHOSPH6 expression in HeLa (A), A-431 (B) and KNRK (C) whole cell lysates.



MPHOSPH6 (D-3): sc-393429. Immunoperoxidase staining of formalin fixed, paraffin-embedded human tonsil tissue showing nuclear and cytoplasmic staining of cells in germinal center and cells in non-germinal center.

## 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.