

# Hint1 (H-5): sc-365015

## BACKGROUND

Hint1 (histidine triad nucleotide binding protein 1), also known as PRKCNH1 or PKCI1, is a 126 amino acid protein that localizes to both the cytoplasm and the nucleus and contains one HIT (histidine triad) domain. Widely expressed and existing as a homodimer, Hint1 functions to hydrolyze adenosine 5'-monophosphoramidate substrates, such as AMP-N-alanine methyl ester, AMP-morpholidate and AMP- $\alpha$ -acetyl lysine methyl ester, and may also inhibit PKC function and influence apoptosis. Knockdown of Hint1 mRNA results in downregulation of p53 and Bax, suggesting that Hint1 is a haplo-insufficient tumor suppressor. Also, it is suspected that promoter hypermethylation of the gene encoding Hint1 may play a role in hepatocarcinogenesis.

## REFERENCES

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8. Wang, L., et al. 2009. Hint1 inhibits  $\beta$ -catenin/TCF4, USF2 and NF $\kappa$ B activity in human hepatoma cells. *Int. J. Cancer* 124: 1526-1534.
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## CHROMOSOMAL LOCATION

Genetic locus: HINT1 (human) mapping to 5q23.3; Hint1 (mouse) mapping to 11 B1.3.

## SOURCE

Hint1 (H-5) is a mouse monoclonal antibody raised against amino acids 8-47 mapping near the N-terminus of Hint 1 of human origin.

## PRODUCT

Each vial contains 200  $\mu$ g IgG $\gamma$  kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

## APPLICATIONS

Hint1 (H-5) is recommended for detection of Hint1 of mouse, rat and human origin by Western Blotting (starting dilution 1:100, dilution range 1:100-1:1000), immunoprecipitation [1-2  $\mu$ g per 100-500  $\mu$ g 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).

Suitable for use as control antibody for Hint1 siRNA (h): sc-92005, Hint1 siRNA (m): sc-145966, Hint1 shRNA Plasmid (h): sc-92005-SH, Hint1 shRNA Plasmid (m): sc-145966-SH, Hint1 shRNA (h) Lentiviral Particles: sc-92005-V and Hint1 shRNA (m) Lentiviral Particles: sc-145966-V.

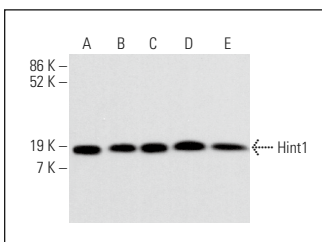
Molecular Weight of Hint1: 14 kDa.

Positive Controls: Jurkat whole cell lysate: sc-2204, Neuro-2A whole cell lysate: sc-364185 or HeLa whole cell lysate: sc-2200.

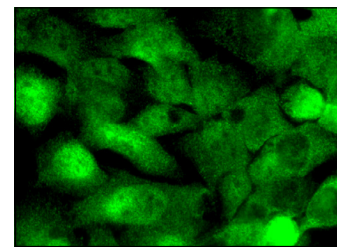
## RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended: 1) Western Blotting: use m-IgG $\kappa$  BP-HRP: sc-516102 or m-IgG $\kappa$  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-IgG $\kappa$  BP-FITC: sc-516140 or m-IgG $\kappa$  BP-PE: sc-516141 (dilution range: 1:50-1:200) with UltraCruz® Mounting Medium: sc-24941 or UltraCruz® Hard-set Mounting Medium: sc-359850.

## DATA



Hint1 (H-5): sc-365015. Western blot analysis of Hint1 expression in Jurkat (A), HeLa (B), MM-142 (C), Neuro-2A (D) and C6 (E) whole cell lysates.



Hint1 (H-5): sc-365015. Immunofluorescence staining of formalin-fixed Hep G2 cells showing cytoplasmic and nuclear localization.

## 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.