

# Hint1 Polyclonal Antibody

Catalog # AP70319

## Product Information

Application	WB, IHC-P, IF, ICC, E
Primary Accession	<a href="#">P49773</a>
Reactivity	Human, Mouse, Rat
Host	Rabbit
Clonality	Polyclonal
Calculated MW	13802

## Additional Information

Gene ID	3094
Other Names	HINT1; HINT; PKCI1; PRKCNH1; Histidine triad nucleotide-binding protein 1; Adenosine 5'-monophosphoramidase; Protein kinase C inhibitor 1; Protein kinase C-interacting protein 1; PKCI-1
Dilution	WB~~Western Blot: 1/500 - 1/2000. Immunohistochemistry: 1/100 - 1/300. Immunofluorescence: 1/200 - 1/1000. ELISA: 1/20000. Not yet tested in other applications. IHC-P~~N/A IF~~1:50~200 ICC~~N/A E~~N/A
Format	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.09% (W/V) sodium azide.
Storage Conditions	-20°C

## Protein Information

Name	HINT1
Synonyms	HINT, PKCI1, PRKCNH1
Function	Exhibits adenosine 5'-monophosphoramidase activity, hydrolyzing purine nucleotide phosphoramidates with a single phosphate group such as adenosine 5'monophosphoramidate (AMP-NH <sub>2</sub> ) to yield AMP and NH <sub>2</sub> (PubMed: <a href="#">15703176</a> , PubMed: <a href="#">16835243</a> , PubMed: <a href="#">17217311</a> , PubMed: <a href="#">17337452</a> , PubMed: <a href="#">22329685</a> , PubMed: <a href="#">23614568</a> , PubMed: <a href="#">28691797</a> , PubMed: <a href="#">29787766</a> , PubMed: <a href="#">31990367</a> ). Hydrolyzes adenosine 5'monophosphomorpholidate (AMP-morpholidate) and guanosine 5'monophosphomorpholidate (GMP-morpholidate) (PubMed: <a href="#">15703176</a> , PubMed: <a href="#">16835243</a> ). Hydrolyzes lysyl-AMP (AMP-N-epsilon-(N-alpha-acetyl lysine methyl ester)) generated by lysine tRNA ligase, as well as Met- AMP, His-AMP and Asp-AMP, lysyl-GMP (GMP-N-epsilon-(N-alpha-acetyl lysine methyl ester)) and AMP-N-alanine methyl ester (PubMed: <a href="#">15703176</a> , PubMed: <a href="#">17337452</a> , PubMed: <a href="#">22329685</a> ). Hydrolyzes 3-indolepropionic acyl-

adenylate, tryptamine adenosine phosphoramidate monoester and other fluorogenic purine nucleoside tryptamine phosphoramidates in vitro (PubMed:[17217311](#), PubMed:[17337452](#), PubMed:[23614568](#), PubMed:[28691797](#), PubMed:[29787766](#), PubMed:[31990367](#)). Can also convert adenosine 5'-O- phosphorothioate and guanosine 5'-O-phosphorothioate to the corresponding nucleoside 5'-O-phosphates with concomitant release of hydrogen sulfide (PubMed:[30772266](#)). In addition, functions as scaffolding protein that modulates transcriptional activation by the LEF1/TCF1-CTNNB1 complex and by the complex formed with MITF and CTNNB1 (PubMed:[16014379](#), PubMed:[22647378](#)). Modulates p53/TP53 levels and p53/TP53-mediated apoptosis (PubMed:[16835243](#)). Modulates proteasomal degradation of target proteins by the SCF (SKP2-CUL1-F-box protein) E3 ubiquitin-protein ligase complex (PubMed:[19112177](#)). Also exhibits SUMO-specific isopeptidase activity, deconjugating SUMO1 from RGS17 (PubMed:[31088288](#)). Deconjugates SUMO1 from RANGAP1 (By similarity).

#### Cellular Location

Cytoplasm. Nucleus. Note=Interaction with CDK7 leads to a more nuclear localization.

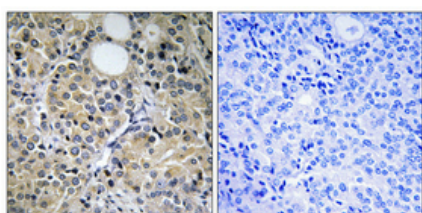
#### Tissue Location

Widely expressed.

## Background

Hydrolyzes purine nucleotide phosphoramidates with a single phosphate group, including adenosine 5'monophosphoramidate (AMP-NH<sub>2</sub>), adenosine 5'monophosphomorpholidate (AMP-morpholidate) and guanosine 5'monophosphomorpholidate (GMP-morpholidate). Hydrolyzes lysyl-AMP (AMP-N-epsilon-(N-alpha-acetyl lysine methyl ester)) generated by lysine tRNA ligase, as well as Met-AMP, His- AMP and Asp-AMP, lysyl-GMP (GMP-N-epsilon-(N-alpha-acetyl lysine methyl ester)) and AMP-N-alanine methyl ester. Can also convert adenosine 5'-O-phosphorothioate and guanosine 5'-O- phosphorothioate to the corresponding nucleoside 5'-O-phosphates with concomitant release of hydrogen sulfide. In addition, functions as scaffolding protein that modulates transcriptional activation by the LEF1/TCF1-CTNNB1 complex and by the complex formed with MITF and CTNNB1. Modulates p53/TP53 levels and p53/TP53-mediated apoptosis. Modulates proteasomal degradation of target proteins by the SCF (SKP2-CUL1-F-box protein) E3 ubiquitin- protein ligase complex.

## Images



Immunohistochemical analysis of paraffin-embedded Human prostate cancer. Antibody was diluted at 1:100(4°,overnight). High-pressure and temperature Tris-EDTA,pH8.0 was used for antigen retrieval. Negative contrl (right) obtained from antibody was pre-absorbed by immunogen peptide.

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