

HINT1 Antibody
Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP50699**Specification**

HINT1 Antibody - Product Information

Application	WB, IF
Primary Accession	P49773
Reactivity	Human, Mouse, Rat
Host	Rabbit
Clonality	Polyclonal
Calculated MW	14 KDa
Antigen Region	85-116

HINT1 Antibody - Additional Information**Gene ID** 3094**Other Names**

Histidine triad nucleotide-binding protein 1, 3---, Adenosine 5'-monophosphoramidase, Protein kinase C inhibitor 1, Protein kinase C-interacting protein 1, PKCI-1, HINT1, HINT, PKCI1, PRKCNH1

Dilution

WB~~1:500

IF~~1:100

Format

Rabbit IgG in phosphate buffered saline (without Mg²⁺ and Ca²⁺), pH 7.4, 150mM NaCl, 0.09% (W/V) sodium azide and 50% glycerol.

Storage Conditions

-20°C

HINT1 Antibody - 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-NH₂) to yield AMP and NH₂ (PubMed:15703176, PubMed:16835243, PubMed:17217311, PubMed:17337452, PubMed:22329685, PubMed:23614568)

target="_blank">23614568, PubMed:28691797, PubMed:29787766, PubMed:31990367). Hydrolyzes adenosine 5'monophosphomorpholidate (AMP-morpholidate) and guanosine 5'monophosphomorpholidate (GMP-morpholidate) (PubMed:15703176, PubMed:16835243). 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:15703176, PubMed:17337452, PubMed:22329685). 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

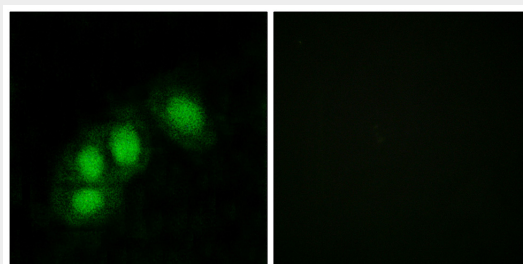
Widely expressed.

HINT1 Antibody - Protocols

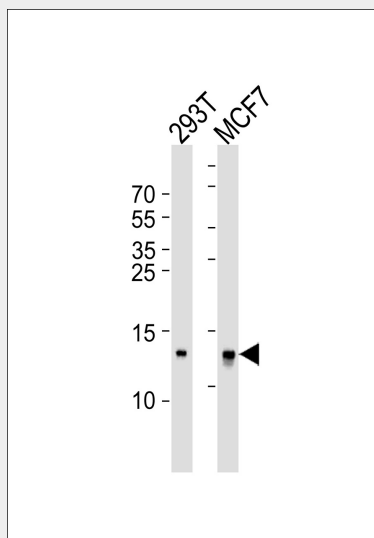
Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

HINT1 Antibody - Images



Immunofluorescence analysis of HeLa cells, using HINT1 antibody.



Western blot analysis of lysates from 293T, MCF7 cell line (from left to right), using HINT1 Antibody (AP50699). AP50699 was diluted at 1:500 at each lane. A goat anti-rabbit IgG H&L (HRP) at 1:5000 dilution was used as the secondary antibody. Lysates at 35 µg per lane.

HINT1 Antibody - Background

Hydrolyzes purine nucleotide phosphoramidates with a single phosphate group, including adenosine 5'-monophosphoramidate (AMP-NH₂), 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.

HINT1 Antibody - References

- Brzoska P.M., et al. Genomics 36:151-156 (1996).
- Brzoska P.M., et al. Proc. Natl. Acad. Sci. U.S.A. 92:7824-7828 (1995).
- Ota T., et al. Nat. Genet. 36:40-45 (2004).
- Ebert L., et al. Submitted (JUN-2004) to the EMBL/GenBank/DDBJ databases.
- Lima C.D., et al. Proc. Natl. Acad. Sci. U.S.A. 93:5357-5362 (1996).