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# Anti-HINT1 Picoband Antibody

Catalog # ABO12318

## Product Information

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| **Application** | WB, IHC-P |
| **Primary Accession** | P49773 |
| **Host** | Rabbit |
| **Reactivity** | Human, Mouse, Rat |
| **Clonality** | Polyclonal |
| **Format** | Lyophilized |
| **Description** | Rabbit IgG polyclonal antibody for Histidine triad nucleotide-binding protein 1(HINT1) detection. Tested with WB, IHC-P in Human;Mouse;Rat. |
| **Reconstitution** | Add 0.2ml of distilled water will yield a concentration of 500ug/ml. |

## Additional Information

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| **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 |
| **Calculated MW** | 13802 |
| **Application Details** | Immunohistochemistry(Paraffin-embedded Section), 0.5-1 □g/ml, Human, Mouse, Rat, By Heat<br><br>Western blot, 0.1-0.5 □g/ml, Human, Rat |
| **Subcellular Localization** | Cytoplasm. Nucleus. Interaction with CDK7 leads to a more nuclear localization. |
| **Tissue Specificity** | Widely expressed. |
| **Source** | Eukaryota |
| **Protein Name** | Histidine triad nucleotide-binding protein 1 |
| **Contents** | Each vial contains 5mg BSA, 0.9mg NaCl, 0.2mg Na2HPO4, 0.05mg NaN3. |
| **Immunogen** | A synthetic peptide corresponding to a sequence in the middle region of human HINT1 (59-92aa HISQISVAEDDDESLLGHLMIVGKKCAADLGLNK), different from the related mouse and rat sequences by three amino acids. |
| **Purification** | Immunogen affinity purified. |

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| **Cross Reactivity** | No cross reactivity with other proteins |
| **Storage** | At -20˚C for one year. After r˚Constitution, at 4˚C for one month. It˚Can also be aliquotted and stored frozen at -20˚C for a longer time.Avoid repeated freezing and thawing. |

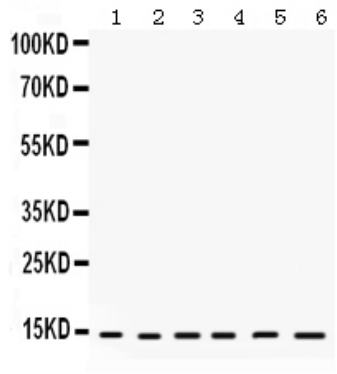
## Protein Information

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| **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, 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. |

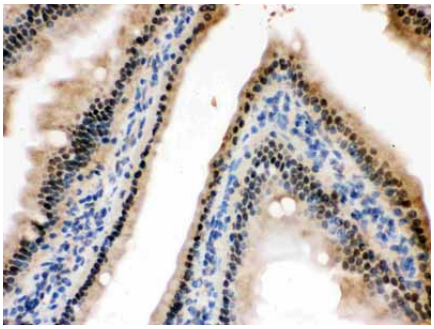
## Background

Histidine triad nucleotide-binding protein 1 is a protein that in humans is encoded by the HINT1 gene. It is a haploinsufficient tumor suppressor gene that inhibits the Wnt/ □-catenin pathway in colon cancer cells and Microphthalmia-associated transcription factor (MITF) activity in human mast cells. The protein encoded by this gene can hydrolyze substrates such as AMP-morpholidate, AMP-N-alanine methyl ester, AMP-alpha-acetyl lysine methyl ester, and AMP-NH2. The encoded protein interacts with these substrates via a histidine triad motif, which is part of the loop that binds to the substrate. Several transcript variants, but only one of them protein-coding, have been found for this gene.

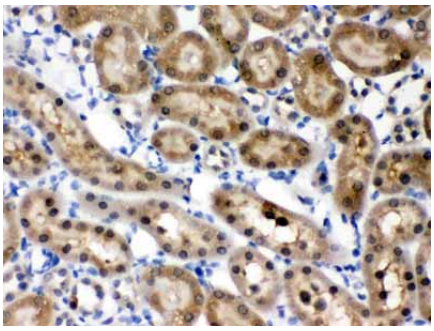
## Images



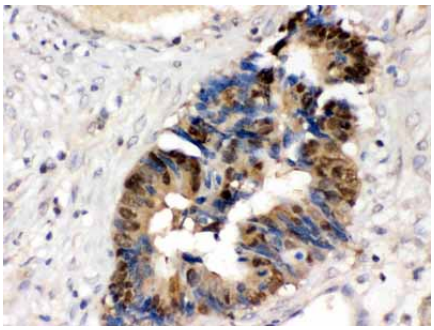

Anti- HINT1 Picoband antibody, ABO12318, Western blottingAll lanes: Anti HINT1 (ABO12318) at 0.5ug/mlLane 1: Rat Liver Tissue Lysate at 50ugLane 2: Rat Thymus Tissue Lysate at 50ugLane 3: Rat Testis Tissue Lysate at 50ugLane 4: Rat Skeletal Muscle Tissue Lysate at 50ugLane 5: HELA Whole Cell Lysate at 40ugLane 6: 22RV1 Whole Cell Lysate at 40ugPredicted bind size: 14KDObserved bind size: 14KD



Anti- HINT1 Picoband antibody, ABO12318, IHC(P)IHC(P): Mouse Intestine Tissue



Anti- HINT1 Picoband antibody, ABO12318, IHC(P)IHC(P): Rat Kidney Tissue



Anti- HINT1 Picoband antibody, ABO12318, IHC(P)IHC(P): Human Intestinal Cancer Tissue

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