

# Recombinant Human Histidine Triad Nucleotide Binding Protein 1

**Cat. No.** HINT1-4397H    **Lot. No.** (See product label)

## SPECIFICATION

|                            |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
|----------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Product Overview</b>    | HINT1 Human Recombinant produced in E.Coli is a single, non-glycosylated, polypeptide chain containing 126 amino acids (1-126 a.a.) and having a molecular mass of 13.8 kDa. The HINT1 is purified by proprietary chromatographic techniques.                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| <b>Species</b>             | Human                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| <b>Source</b>              | Human                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| <b>ProteinLength</b>       | 1-126 a.a.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
| <b>Description</b>         | <p>HINT1, also known as Histidine triad nucleotide-binding protein 1 is part of the superfamily named for a near C-terminal HXHXHXX motif (H:Histidine, X:a hydrophobic amino acid) positioned at the <math>\gamma</math>-phosphate of nucleotide substrates. HINT1 hydrolyzes adenosine 5'-monophosphoramidate substrates such as AMP-morpholidate, AMP-N-alanine methyl ester, AMP-alpha-acetyl lysine methyl ester and AMP-NH<sub>2</sub>. Though it was initially considered to be a protein kinase C inhibitor and act as a haplod-insufficient tumor suppressor including spontaneous tumor formation in Hint+/- and Hint-/- , its actual physiologic function is not known.</p> |
| <b>Form</b>                | The HINT1 solution contains 20mM Tris pH-8 & 10% glycerol.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
| <b>Purity</b>              | Greater than 90.0% as determined by SDS-PAGE.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| <b>Physical Appearance</b> | Sterile Filtered colorless solution.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |

 Tel: 1-631-559-9269    1-516-512-3133

 Email: [info@creative-biomart.com](mailto:info@creative-biomart.com)     Fax: 1-631-938-8127

 45-1 Ramsey Road, Shirley, NY 11967, USA

|                            |                                                                                                                                                                                                                                                                                                                                     |
|----------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Amino acid sequence</b> | MADEIAKAQV ARPGGDTIFG KIIRKEIPAK IIFEDDRCLA FHDISPQAPT<br>HFLVIPKKHI SQISVAEDDD ESLLGHLMIIV GKKCAADLGL NKGYRMVVNE<br>GSDGGQSVYH VHLHVLGGRQ MHWPPG.                                                                                                                                                                                  |
| <b>Storage</b>             | HINT1 although stable 4°C for 4 weeks, should be stored desiccated below -18°C.<br>For long term storage it is recommended to add a carrier protein (0.1% HSA or BSA).<br>Please prevent freeze-thaw cycles.                                                                                                                        |
| <b>GENE INFORMATION</b>    |                                                                                                                                                                                                                                                                                                                                     |
| <b>Gene Name</b>           | HINT1 histidine triad nucleotide binding protein 1 [ Homo sapiens ]                                                                                                                                                                                                                                                                 |
| <b>Official Symbol</b>     | HINT1                                                                                                                                                                                                                                                                                                                               |
| <b>Synonyms</b>            | HINT1; histidine triad nucleotide binding protein 1; HINT; PKCI-1; PRKCNH1;<br>FLJ30414; FLJ32340; histidine triad nucleotide-binding protein 1;<br>OTTHUMP00000159244; protein kinase C inhibitor 1; adenosine 5"-<br>monophosphoramidase; protein kinase C-interacting protein 1; Adenosine 5"-<br>monophosphoramidase; EC 3.-.-. |
| <b>Gene ID</b>             | 3094                                                                                                                                                                                                                                                                                                                                |
| <b>mRNA Refseq</b>         | NM_005340                                                                                                                                                                                                                                                                                                                           |
| <b>Protein Refseq</b>      | NP_005331                                                                                                                                                                                                                                                                                                                           |
| <b>MIM</b>                 | 601314                                                                                                                                                                                                                                                                                                                              |
| <b>UniProt ID</b>          | P49773                                                                                                                                                                                                                                                                                                                              |
| <b>Chromosome</b>          | 5q31.2                                                                                                                                                                                                                                                                                                                              |

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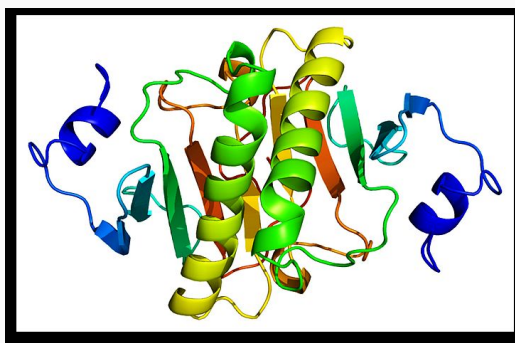
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**Location**

**Function**

hydrolase activity; protein kinase C binding

PDB rendering based  
on 1av5



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