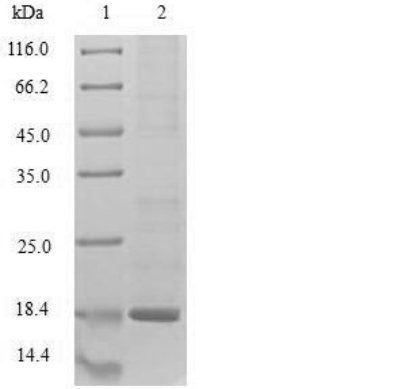
Recombinant Rabbit Histidine triad nucleotide-binding protein 1 (HINT1)

Product Code	CSB-MP301425RB
Relevance	Functions as enzyme, and 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 (By similarity). Hydrolyzes purine nucleotide phosphoramidates, 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, 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.
Abbreviation	Recombinant Rabbit HINT1 protein
Storage	The shelf life is related to many factors, storage state, buffer ingredients, storage temperature and the stability of the protein itself. Generally, the shelf life of liquid form is 6 months at -20°C/-80°C. The shelf life of lyophilized form is 12 months at -20°C/-80°C.
Uniprot No.	P80912
Alias	Adenosine 5'-monophosphoramidase P13.7
Product Type	Recombinant Protein
Immunogen Species	Oryctolagus cuniculus (Rabbit)
Purity	Greater than 90% as determined by SDS-PAGE.
Sequence	ADEIAKAQVARPGGDTIFGKIIRKEIPAKIIFEDDQCLAFHDISPQAPTHFLVIPKK HISQISAAEDADESLLGHLMIVGKKCAADLGLKKGYRMVVNEGSDGGQSVYHV HLHVLGGRQMNWPPG
Research Area	Epigenetics and Nuclear Signaling
Source	Mammalian cell
Target Names	HINT1
Protein Names	Recommended name: Histidine triad nucleotide-binding protein 1 EC= 3.-.-.- Alternative name(s): Adenosine 5'-monophosphoramidase P13.7
Expression Region	2-126aa
Notes	Repeated freezing and thawing is not recommended. Store working aliquots at 4°C for up to one week.

Tag Info	N-terminal 10xHis-tagged and C-terminal Myc-tagged
Mol. Weight	17.6kDa
Protein Length	Full Length of Mature Protein

Image



(Tris-Glycine gel) Discontinuous SDS-PAGE (reduced) with 5% enrichment gel and 15% separation gel.

Description

The region for expressing recombinant Rabbit HINT1 contains amino acids 2-126. The expected molecular weight for the HINT1 protein is calculated to be 17.6 kDa. This HINT1 protein is produced using mammalian cell expression system. The N-terminal 10xHis tag and C-terminal Myc tag was fused into the coding gene segment of HINT1, making it easier to detect and purify the HINT1 recombinant protein in the later stages of expression and purification.

The rabbit histidine triad nucleotide-binding protein 1 (HINT1) is a vital player in nucleotide metabolism, contributing to purine nucleotide recycling within cells. Its main functions extend to regulating cellular processes such as signal transduction, apoptosis, and genomic stability. Research on rabbit HINT1 focuses on unraveling its precise roles in nucleotide metabolism and cellular signaling pathways. Additionally, investigations explore the potential implications of HINT1 in various physiological and pathological conditions. Understanding the functions of rabbit HINT1 provides valuable insights into conserved biological processes across species, shedding light on its significance in maintaining cellular homeostasis and its potential as a target for therapeutic interventions.

Reconstitution

We recommend that this vial be briefly centrifuged prior to opening to bring the contents to the bottom. Please reconstitute protein in deionized sterile water to a concentration of 0.1-1.0 mg/mL.We recommend to add 5-50% of glycerol (final concentration) and aliquot for long-term storage at -20°C/-80°C. Our default final concentration of glycerol is 50%. Customers could use it as reference.

Shelf Life

The shelf life is related to many factors, storage state, buffer ingredients, storage temperature and the stability of the protein itself.
Generally, the shelf life of liquid form is 6 months at -20°C/-80°C. The shelf life of lyophilized form is 12 months at -20°C/-80°C.