

## Product datasheet for **RC203319**

### **HINT1 (NM\_005340) Human Tagged ORF Clone**

#### Product data:

**Product Type:** Expression Plasmids  
**Product Name:** HINT1 (NM\_005340) Human Tagged ORF Clone  
**Tag:** Myc-DDK  
**Symbol:** HINT1  
**Synonyms:** HINT; NMAN; PKCI-1; PRKCNH1  
**Mammalian Cell Selection:** Neomycin  
**Vector:** pCMV6-Entry (PS100001)  
**E. coli Selection:** Kanamycin (25 ug/mL)  
**ORF Nucleotide Sequence:** >RC203319 ORF sequence  
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCC**CGATCGCC**

ATGGCAGATGAGATTGCCAAGGCTCAGGTCGCTCGGCCTGGTGGCGACACGATCTTTGGGAAGATCATCC  
 GCAAGGAAATACCAGCCAAAATCATTTTGAGGATGACCGGTGCCTTGCTTCCATGACATTTCCCTCA  
 AGCACCAACACATTTTCTGGTGATACCAAGAAACATATATCCAGATTTCTGTGGCAGAAGATGATGAT  
 GAAAGTCTTCTGGACACTTAATGATTGTTGGCAAGAAATGTGCTGCTGATCTGGGCCTGAATAAGGGTT  
 ATCGAATGGTGGTGAATGAAGTTTCAGATGGTGGACAGTCTGTCTATCACGTTTCATCTCCATGTTCTTGG  
 AGGTCGGCAAATGCATTGGCCTCCTGGT

**ACGCGT**ACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT  
 ACAAGGATGACGACGATAAGGTTTAA

**Protein Sequence:** >RC203319 protein sequence  
 Red=Cloning site Green=Tags(s)

MADEIAKAQVARPGDITFGKIIRKEIPAKIIFEDDRCLAFHDISPQAPTHFLVIPKKHISQISVAEDDD  
 ESSLGHLMIIVGKKAADLGLNKGVMVNEGSDGGQSVYHVHLHVLGGRQMHWPFG

**TR**TRPLEQKLISEEDLAANDILDYKDDDDKV

**Chromatograms:** [https://cdn.origene.com/chromatograms/mk6416\\_d03.zip](https://cdn.origene.com/chromatograms/mk6416_d03.zip)

**Restriction Sites:** SgfI-MluI


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## Cloning Scheme:



ACCN: NM\_005340

ORF Size: 378 bp

OTI Disclaimer: The molecular sequence of this clone aligns with the gene accession number as a point of reference only. However, individual transcript sequences of the same gene can differ through naturally occurring variations (e.g. polymorphisms), each with its own valid existence. This clone is substantially in agreement with the reference, but a complete review of all prevailing variants is recommended prior to use. [More info](#)

OTI Annotation: This clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.

Components: The ORF clone is ion-exchange column purified and shipped in a 2D barcoded Matrix tube containing 10ug of transfection-ready, dried plasmid DNA (reconstitute with 100 ul of water).

Reconstitution Method:

1. Centrifuge at 5,000xg for 5min.
2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.
3. Close the tube and incubate for 10 minutes at room temperature.
4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom.
5. Store the suspended plasmid at -20°C. The DNA is stable for at least one year from date of shipping when stored at -20°C.

Note: Plasmids are not sterile. For experiments where strict sterility is required, filtration with 0.22um filter is required.

RefSeq: [NM\\_005340.7](#)

RefSeq Size: 689 bp

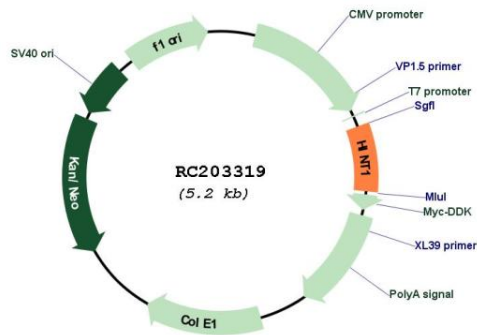
RefSeq ORF: 381 bp

Locus ID: 3094  
 UniProt ID: [P49773](#)  
 Cytogenetics: 5q23.3

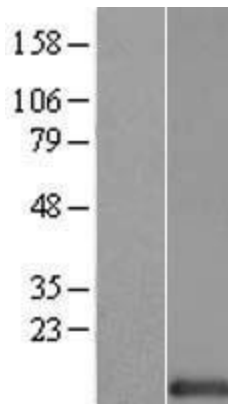
Domains: HIT  
 MW: 13.8 kDa

**Gene Summary:** This gene encodes a protein that hydrolyzes purine nucleotide phosphoramidates substrates, including AMP-morpholidate, AMP-N-alanine methyl ester, AMP-alpha-acetyl lysine methyl ester, and AMP-NH<sub>2</sub>. The encoded protein interacts with these substrates via a histidine triad motif. This gene is considered a tumor suppressor gene. In addition, mutations in this gene can cause autosomal recessive neuromyotonia and axonal neuropathy. There are several related pseudogenes on chromosome 7. Several transcript variants have been observed. [provided by RefSeq, Dec 2015]

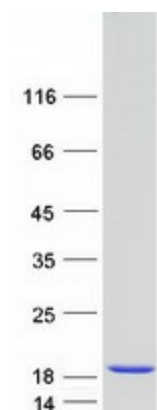
## Product images:



Circular map for RC203319



Western blot validation of overexpression lysate (Cat# [LY417372]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC203319 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified HINT1 protein (Cat# [TP303319]). The protein was produced from HEK293T cells transfected with HINT1 cDNA clone (Cat# RC203319) using MegaTran 2.0 (Cat# [TT210002]).