

Product datasheet for RC209571

HAT1 (NM_001033085) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	HAT1 (NM_001033085) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	HAT1
Synonyms:	histone acetyltransferase 1; KAT1
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>RC209571 ORF sequence Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGGATCGCC**

ATGTTCCGTGTTGAATATGCATCTAAAGTTGATGAGAAGTTGACTGTGTAGAGGCAGATGATGTTGAGG
GCAAAATTAGACAAATCATTCCACCTGGATTTGCACAAACACGAATGATTCCTTTCTTTACTGGAAAA
GGAAGTTGATTTCAAGCCATTCCGAACCTTACTTCATACCTACTCAGTTCTCAGTCCAACAGGAGGAGAA
AACTTTACCTTTTCAGATATATAAGGCTGACATGACATGTAGAGGCTTTGAGAATATCATGAAAGGCTTC
AGACCTTTTTGATGTGGTTTATTGAAACTGCTAGCTTTATTGACGTGGATGATGAAAGATGGCACTACTT
TCTAGTATTTGAGAAGTATAATAAGGATGGAGCTACGCTCTTTCGACCGTAGGCTACATGACAGTCTAT
AATTACTATGTGTACCCAGACAAAACCCGGCCACGTGTAAGTCAGATGCTGATTTTGACTCCATTTCAAG
GTCAAGGCCATGGTGCTCAACTTCTTGAACAGTTCATAGATACTACACTGAATTTCTACAGTTCTTGA
TATTACAGCGGAAGATCCATCCAAAAGCTATGTGAAATTACGAGACTTTGTGCTTGTGAAGCTTTGTCAA
GATTTGCCCTGTTTTCCCGGAAAAAATAATGCAAGGATTCAATGAAGATATGGCGATAGAGGCACAAC
AGAAGTTCAAAAATAAATAAGCAACACGCTAGAAGGTTTATGAAATTCCTCGACTACTGGTAACTGACAT
GAGTGTGCCGAACAATACAGAAGCTACAGACTGGATATTAAGAAGACTAATTAGCCCATATAAGAAA
AAGCAGAGAGATCTTGCTAAGATGAGAAAATGTCTCAGACCAGAAGAACTGACAAACCAGATGAACCAA
TAGAAAATAAGCATGCAACATGAACAGCTGGAAGAGATTTTCAGGAAGTGTGGAAGATTACCGGCGTGT
TATTGAACGACTTGCTCAAGAG

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA



[View online »](#)

Protein Sequence: >RC209571 protein sequence
Red=Cloning site Green=Tags(s)

MFRVEYASKVDENFDCVEADDVEGKIRQIIPPGFCTNTNDFLSLLEKEVDFKPFGLLHTYSVLSPTGGE
 NFFTFQIYKADMTCRGFREYHERLQTFMLWFIETASFIDVDDERWHYFLVFEKYNKDGATLFATVGYMTVY
 NYYVYPDKTRPRVSQMLILTPFQGGHGAQLLETVHRYYTEFPTVLDITAEDPSKSYVKLRDFVLVKLCQ
 DLPCFSREKLMQGFNEDMAIEAQQKFKINKQHARRVYEILRLLVTDMSDAEQYRSYRLDIKRRLISPYKK
 KQRDLAKMRKCLRPEELTNQMNQIEISMQHEQLEESFQELVEDYRRVIERLAQE

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mk6354_e05.zip

Restriction Sites: SgfI-MluI

Cloning Scheme:

Cloning sites used for ORF Shuttling:



* The last codon before the Stop codon of the ORF

ACCN: NM_001033085

ORF Size: 1002 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.

RefSeq: [NM_001033085.1](#), [NP_001028257.1](#)

RefSeq Size: 1596 bp

RefSeq ORF: 1004 bp

Locus ID: 8520

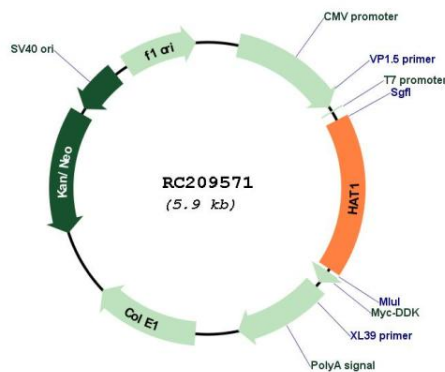
Cytogenetics: 2q31.1

Protein Families: Druggable Genome

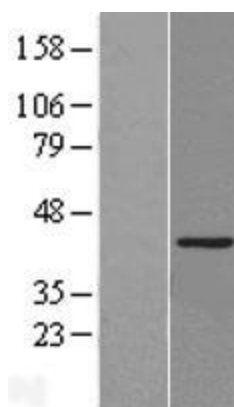
MW: 39.8 kDa

Gene Summary: The protein encoded by this gene is a type B histone acetyltransferase (HAT) that is involved in the rapid acetylation of newly synthesized cytoplasmic histones, which are in turn imported into the nucleus for de novo deposition onto nascent DNA chains. Histone acetylation, particularly of histone H4, plays an important role in replication-dependent chromatin assembly. Specifically, this HAT can acetylate soluble but not nucleosomal histone H4 at lysines 5 and 12, and to a lesser degree, histone H2A at lysine 5. Alternatively spliced transcript variants have been identified for this gene. [provided by RefSeq, Jun 2009]

Product images:



Circular map for RC209571



Western blot validation of overexpression lysate (Cat# [LY422364]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC209571 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).