

Product datasheet for RC207082

NAT10 (NM_024662) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	NAT10 (NM_024662) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	NAT10
Synonyms:	ALP; Kre33; NET43
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>RC207082 ORF sequence Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGCATCGAAAAAGGTGGATAACCGAATCCGGATTCTCATTGAGAATGGAGTAGCTGAGCGCAAAGAT
CTCTCTTTGTTGTAGTTGGGATCGAGGAAAAGATCAGGTGGTAATACTTCATCACATGTTATCCAAAGC
AACTGTGAAGGCTCGGCCTTCAGTGTGTGGTGTATAAGAAAGAGCTGGGGTTTAGCAGTCACCGGAAG
AAAAGAATGCGACAGCTGCAGAAGAAAAATAAGAATGGAACACTGAACATAAAGCAGGACGACCCCTTTG
AACTCTTCATAGCAGCCACAAACATTGCTACTGCTACTACAACGAGACCCACAAGATCCTGGGCAATAC
CTTCGGCATGTGTGTGCTGCAGGATTTGAAGCCTTAACCTCAAACCTTGCTGGCCAGGACTGTAGAAACA
GTGGAAGGTGGTGGGCTAGTGGTCATCCTCTACGGACCATGAACTCACTCAAGCAATTGTACACAGTGA
CTATGGATGTGCATTCCAGGTACAGAACTGAGGCCATCAGGATGTGGTGGGAAGATTTAATGAAAGGTT
TATTCTGTCTCTGGCCTCTTGAAGAAGTGTCTCGTCATTGATGACCAGCTCAACATCCTGCCATCTCC
TCCCACGTTGCCACATGGAGGCCCTGCCTCCCAAGCTCCGGATGAGAGTCTTGGTCTCTGTACTGG
AGCTGAGGGAGTTGAAGGAGAGCTTGCAGGACACCCAGCCTGTGGGTGTGTTGGTGGACTGCTGTAAGAC
TCTAGACCAGGCCAAAGCTGTCTTGAATTTATCGAGGGCATCTCTGAAAAGACCCTGAGGAGTACTGTT
GCACTCACAGCTGCTCGAGGACGGGAAAATCTGCAGCCCTGGGATTGGCGATTGCTGGGGCGGTGGCAT
TTGGGTACTCCAATATCTTTGTTACCTCCCAAGCCTGATAACCTCCATACTCTGTTTGAATTTGTATT
TAAAGGATTTGATGCTCTGCAATATCAGGAACATCTGGATTATGAGATTATCCAGTCTCTAAATCTGAA
TTTAAACAAAGCAGTGATCAGAGTGAATGTATTTGAGAACACAGGCAGACTATTCAGTATATACATCCTG
CAGATGCTGTGAAGCTGGGCCAGGCTGAACTAGTTGTGATTGATGAAGCTGCCGCCATCCCCCTCCCCTT
GGTGAAGAGCCTACTTGGCCCCTACCTGTTTTTCATGGCATCCACCATCAATGGCTATGAGGGCACTGGC
CGGTCACTGTCCCTCAAGCTAATTCAGCAGCTCCGTCAACAGAGCGCCAGAGCCAGGTCAGCACCCTG
CTGAGAATAAGACCACGACGACAGCCAGATTGGCATCAGCGCGGACACTGCATGAGGTTTCCCTCCAGGA
GTCAATCCGATACGCCCTGGGATGCAGTGGAGAAGTGGCTGAATGACTTGCTGTGCTGGATTGCCTC



AACATCACTCGGATAGTCTCAGGCTGCCCTTGCCCTGAAGCTTGTGAACTGACTATGTTAATAGAGATA
 CCCTCTTTTGGCTACCACAAGGCCTCTGAAGTTTCTCCAACGGCTTATGGCCCTCTACGTGGCTTCTCA
 CTAACAAGAACTCTCCCAATGATCTCCAGATGCTCTCCGATGCACCTGCTCACCATCTCTTCTGCCTTCTG
 CCTCTGTGCCCCCACCAGAATGCCCTTCCAGAAGTGTCTGCTGTTATCCAGGTGTGCCTTGAAGGGG
 AGATTTCTCGCCAGTCCATCTTGAACAGTCTGTCTCGAGGCAAGAAGGCTTCAGGGGACCTGATTCGATG
 GACAGTGTGAGAACAGTCCAAGATCCAGACTTTGGTGGTCTGTCTGGTGAAGGGTCTGTCGAGATGTACTATGAAG
 GTTCAACCAAGATTATCAAGGGATGGCTATGGCAGCCGCTCTGCAGCTGCTGCAGATGTACTATGAAG
 GCAGGTTTCTTGTCTGGAGGAAAAGGTCTTGAGACACCACAGGAAATTCACACCGTAAGCAGCGAGGC
 TGTGAGCTTGTGGAAGAGGTATCACTCCCGGAAGGACCTGCCTCCTTACTCCTCAAATTTGAATGAG
 AGGCTGCCGAACGCCTGGATTACCTGGGTGTTTCTATGGCTTGACCCCGAGGCTCCTCAAGTTCTGGA
 AACGAGCTGGATTTGTTCTGTTATCTGAGACAGACCCGAATGACCTGACCGGAGAGCACTCGTGCAT
 CATGCTGAAGACGCTCACTGATGAGGATGAGGCTGACCAGGGAGGCTGGCTTGCAGCCTTCTGAAAAGAT
 TTCGACGGCGGTTCTAGCCTTGTCTCCTACCAGTTCAGTACCTTCTCCTTCCCTGGCTCTGAACA
 TCATTGAGAACAGGAACATGGGGAAGCCAGCCAGCCTGCCCTGAGCCGGGAGGAGCTGGAAGCACTCTT
 CCTCCCCTATGACCTGAAGCGGCTGGAGATGTATTCACGGAATATGGTGGACTATCACCTCATCATGGAC
 ATGATCCCGGCCATCTCTCGCATCTATTTCTGAACCAGCTGGGGGACCTGGCCCTGTCTGCGGCTCAGT
 CGGCTCTTCTTGGGGATTGGCCTGCAGCATAAGTCTGTGGACCAGCTGGAAGGAGATTGAGCTGCC
 CTCGGGCCAGTTGATGGGACTTTTCAACCGGATCATCCGCAAAGTTGTGAAGCTATTTAATGAAGTTCAG
 GAAAAGGCCATTGAGGAGCAGATGGTGGCAGCGAAGGATGTGGTTCATGGAGCCACGATGAAGACCCCTCA
 GTGACGACCTAGATGAAGCAGCAAAGGAATTTCAAGGAGAAACACAAGAAGGAAGTAGGGAAGCTGAAGAG
 CATGGACCTCTCTGAATACATAATCCGTGGGACGATGAAGAGTGAAGTGAAGTTTGAACAAAGCTGGG
 CCGAACGCCTCGATCATCAGCCTGAAAAGTGACAAGAAAAGGAAGTTAGAGGCCAAACAAGAACCCAAAC
 AGAGCAAGAAGTTGAAGAACAGAGAGACAAAGAACAAAAAAGATATGAACTGAAGCGGAAGAAA

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence:

>RC207082 protein sequence
 Red=Cloning site Green=Tags(s)

MHRKKVDNRIRILIENGV AERQ RSLFVVVGDGRGKDQVVILHHMLSKATVKARPSVLWCKKELGFS SHRK
 KRMRQLQKKIKNGTLNLIKQDDPFELFIAATNIRYCYNETHKILGNTFGMCVLQDFEALTPNLLARTVET
 VEGGGLVVILLRTMNSLKQLYTVTMDVHSRYRTEAHQDVVGRFNERFILSLASCKKCLVIDDQLNILPIS
 SHVATMEALPPQTPDES LGPSDLELRELKESLQDTPVGVLDCCCKLDQAKAVLKFIEGISEKTLRSTV
 ALTAARGRGKSAALGLAIAGAVAFGYSNIFVTSPSPDNLHTLFEFVFKGFDALQYQEHLDYEIIQSLNPE
 FNKAVIRVNVFREHRQTIQYIHPADAVKLGQAE LVVIDEAAAIP LPLVKSLLGPYL VFMAS TINGYEGTG
 RSLSLKLIQQLRQSAQSQVSTTAENKTTTARLASARTLHEVSLQESIRYAPGDAVEKWLNDLLCLDCL
 NITRIVSGCPLPEACELYYVNRDTLFCYHKASEVFLQRLMALYVASHYKNPNDLQMLSDAPAHHLFCLL
 PPVPPTQNALPEVLAVIQVCLEGEISRQSILNSLSRGKKASGDLIPWTVSEQFQDPDFGGLSGGRVRIA
 VHPDYQGMGYGSRALQLLQMYEGRFPCL EEKVLETPQE IHTVSSEAVSLL EEVITPRKDL PPLLLKLINE
 RPAERLDYLGVS YGLTPRLLKFWKRAGFVPVYLRQTPNDLTGEHSCIMLKTLD EDEADQGGWLA AFWKD
 FRRRFLALLSYQFSTFSPSLALNIIQNRNMGKPAQPALSREELEALFLPYDLKRLEMYSRNMVDYHLIMD
 MIPAISRIYFLNQLGDLALSAQSALLLIGLQHKSVQLEKEIELPSGQLMGLFNRIIRKVVKLFNEVQ
 EKAIEEQMVAAKDVVMEPTMKTLSDDLDEAAKEFQEKHKKEVGLKSMDLSEYIIRGDDEEWNEVLNKAG
 PNASIISLKS DKKRLEAKQEPKQSKLKNRETKNKKDMKLKRRK

TRTRPLEQKLI SEEDLAANDILDYKDDDDKV

Chromatograms:

https://cdn.origene.com/chromatograms/mk6334_e02.zip

Restriction Sites:

Sgfl-Mlul

Cloning Scheme:


ACCN: NM_024662

ORF Size: 3075 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.

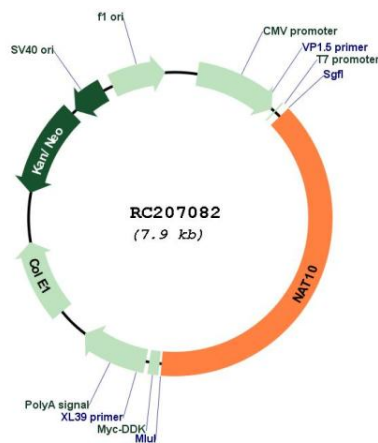
Note: Plasmids are not sterile. For experiments where strict sterility is required, filtration with 0.22um filter is required.

RefSeq: [NM_024662.2](#)

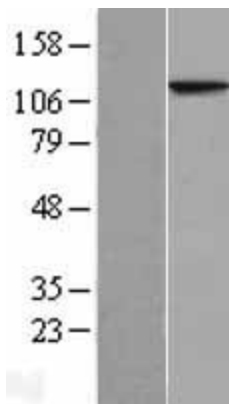
RefSeq Size: 4058 bp

RefSeq ORF:	3078 bp
Locus ID:	55226
UniProt ID:	Q9H0A0
Cytogenetics:	11p13
Domains:	DUF699
MW:	115.7 kDa
Gene Summary:	The protein encoded by this gene is an RNA cytidine acetyltransferase involved in histone acetylation, tRNA acetylation, the biosynthesis of 18S rRNA, and the enhancement of nuclear architecture and chromatin organization. [provided by RefSeq, Oct 2016]

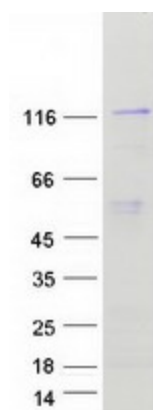
Product images:



Circular map for RC207082



Western blot validation of overexpression lysate (Cat# [LY411178]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC207082 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified NAT10 protein (Cat# [TP307082]). The protein was produced from HEK293T cells transfected with NAT10 cDNA clone (Cat# RC207082) using MegaTran 2.0 (Cat# [TT210002]).