

Product datasheet for RC215964

GATC (NM_176818) Human Tagged ORF Clone

Product data:

Product Type: Expression Plasmids
Product Name: GATC (NM_176818) Human Tagged ORF Clone
Tag: Myc-DDK
Symbol: GATC
Synonyms: 15E1.2; COXPD42
Mammalian Cell Selection: Neomycin
Vector: pCMV6-Entry (PS100001)
E. coli Selection: Kanamycin (25 ug/mL)
ORF Nucleotide Sequence: >RC215964 ORF sequence
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGATCGCC**

ATGTGGTCGCGGTTGGTGTGGCTGGGCCTTCGGGCCCTCTGGCGGGCGCCAGGGCTTCACCTCCAAGG
 CGGATCCTCAGGGCAGTGGCCGGATCACGGCTGCGGTGATCGAGCACCTGGAGCGTCTAGCGTTGTGGA
 CTTGGCAGCCGCGAGGCAGTGGCGGACTGGAGAAAGCTATCGCCTTCGCCACCGGCTACGCGCCGTG
 GACACAGACGGGGTGGAGCCCATGGAATCGTCTGGAGGACAGATGTCTATACCTGAGATCCGACAATG
 TGGTAGAAGGCAACTGTGCTGATGAATTACTACAAAACCTCCCATCGCGTCTGGAGGAGTACTTTGTGGC
 CCCCCAGGTAATATCTCTTTGCCAAAGCTGGATGAACAAGGCCATTCCACACAGCTG

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence: >RC215964 protein sequence
 Red=Cloning site Green=Tags(s)

MWSRLVWLGLRAPLGGRQGFTSKADPQGSGRITAAVIEHLERLALVDFGSREAVARLEKAI AFADRLRAV
 DTDGVEPMESVLEDRCLYL RSDNVVEGNCADELLQNSHRVVEEYFVAPPGNISLPKLDEQEPFPHS

TRTRPLEQKLI SEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mk6457_b01.zip

Restriction Sites: SgfI-MluI



[View online »](#)

Cloning Scheme:


ACCN: NM_176818

ORF Size: 410 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_176818.3](#)

RefSeq Size: 4248 bp

RefSeq ORF: 411 bp

Locus ID: 283459

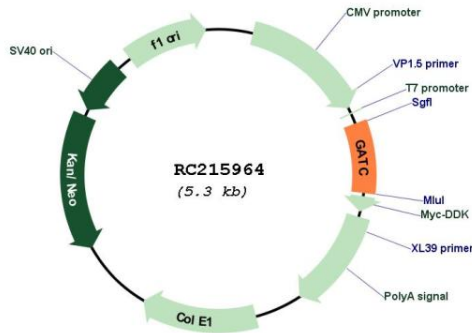
UniProt ID: [O43716](#)

Cytogenetics: 12q24.31

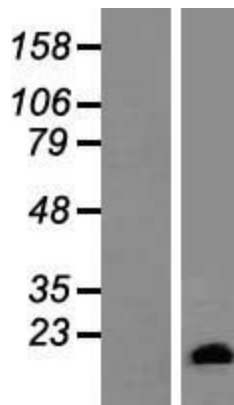
MW: 15.1 kDa

Gene Summary: Allows the formation of correctly charged Gln-tRNA(Gln) through the transamidation of misacylated Glu-tRNA(Gln) in the mitochondria. The reaction takes place in the presence of glutamine and ATP through an activated gamma-phospho-Glu-tRNA(Gln).[UniProtKB/Swiss-Prot Function]

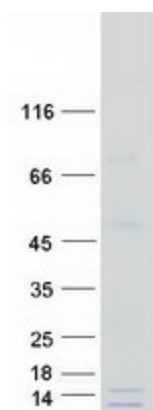
Product images:



Circular map for RC215964



Western blot validation of overexpression lysate (Cat# [LY406107]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC215964 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified GATC protein (Cat# [TP315964]). The protein was produced from HEK293T cells transfected with GATC cDNA clone (Cat# RC215964) using MegaTran 2.0 (Cat# [TT210002]).