

Product datasheet for **RC219421**

PET112L (GATB) (NM_004564) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	PET112L (GATB) (NM_004564) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	PET112L
Synonyms:	COXPD41; HSPC199; PET112; PET112L
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



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ORF Nucleotide Sequence:

>RC219421 representing NM_004564
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGCATCGCC**

ATGGCGCGCCCATGCTGCGCTGGGCTGCCGTGGAAGACGTTGGGCTTTCGCCCGGTTGACGGTGGTT
 CTGGCCACCGAAGAGGGCTCCGACTGGGTCCACATCCAACCAGATTAGGGGAGAGAGCTCAGTGGCTCA
 GCAGCCCTCCACACGGCCAGAAAGACGAGGAAAGGTGAACACAATGGGCTGCTGTGGTAGTTTGGAA
 ATTCATGCCAGATTTCTCCAACCTCTAACTCTTCTCTGGATCTCAAGTTCGTTTTGACGACCTCCAA
 ATCTTTGGTTCTTTTTTGTGCATCTCTACCTGGAACCTTTCGCCGTTCTCAACAGGAGGTGTGTAGA
 AGCGGCGGTGATGACAGGCTGGCTCTGAACTGCCACATAAACAAGAAGTCTTGTGACAGGAAGCAC
 TACTTCTATGCAGACCTCCCTGCAGGCTACCAATTACCCAGCAGAGGCTCCCAATTGCTGTGAATGGGA
 GCTTGATATATGGCGTCTGTGCAGGGAAGAAGCAGAGTCAGGTGATCCCCAAGACGGTGAGGATCAAGCA
 GATCCAGTTGGAGCAAGACAGTGGCAAAAGCCTCCACGACAACCTGAGGTCTCAGACGCTCATTGATTTG
 AACAGGGCAGGAGTGGGCTTCTGGAGGTGGTCCCTGGAGCCCACATGTCTGTGGAGAAGAGCGCGCAA
 CAGCTGTGAGGGAGCTGCAGCTGATCCTTCAAGCCCTGGGGACCAGCCAGGCGAACATGGCAGAGGGCCA
 GTTGAGAGTGGATGCCAATATATCCGTGCATCACCTGGGGAGCCTTTGGGCGTTGCAACGGAAGTGAAG
 AATCTCAACAGCATCAGGTTCTGGCCAAAGCCATAGACTATGAAATTCAGAGGCAATCAATGAACTTG
 AGAATGGAGGTGAAATTCGAACGAAACACGCTCATTTTCATCACAAGCTGGGGTGACCATGTCAATGAG
 AGACAAAGAAGGAAAACAGGACTACAGGTTTCATGCCAGAACCCACCTGCCTCCCTGGTGTCTACGAC
 CGCACATCTCTGCCCGCAGGTGCAGACCCACAGCAAGTATCAATATTGACCAGATTCGGGAGACACTCC
 GCGACTCCCCAGTGTGACCCGAGAGAAGCTTGTCCAACAGTATGGGATGCTGCTGGAACACAGCTTCAC
 TTTGCTGAACGAAGTCGGCCTACTGGAGTTCTTCCAAAATGTGATAAAAGAACTAGGGCAGAGCCAAAA
 AAGGTGACTAGTTGGTCTCAACACTTTTCTGGGCTATTTAAAGCAACGAACCTCGCTGTGAGTGA
 GTCCTGTACACCCTCTGCACTCGCTGAGCTTCTTGACCTGCTGGACAGCAGAACAATTTCTTCATCAGC
 AGCTAAACAGGTGTTGAGGAACTGTGGAAGAGGGAAGGCAAGACTCCAGGGCAGATTGTTTCAGAAAAG
 CAGCTTGAACGATGCAGGACCAGGGGCACTGGAGCAGCTCTGCCACTCTGTGATGGAGGCCATCCTC
 AAGTGGTAAATGGATGTGAAGAACAGAAACCCAGAGCTATAAATAAACTGATTGGGTTGGTCCGAAAAGC
 GACTCAAAGCCGAGCAGATCCAGTCATGATAAAGGAGATCCTGGAGAAGAAGCTGTCATTG

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence:

>RC219421 representing NM_004564
 Red=Cloning site Green=Tags(s)

MAAPMLRWGCRGRRWAFARVDGGSCHRRGAPTGSTSNQIRGESSVAQQPLHTAQKTRKGEHKWAAVVGLE
 IHAQISSNSKLFSGSQVRF SAPPNSLVSFDAASLPGTLPVLNRRVCVEAAVMTGLALNCHINKKSLFDRKH
 YFYADLPAGYQITQQRLPIAVNGSLIYGVCAKQKQSVIPKTVRIKQIQLEQDSGKSLHDNLRSQLIDL
 NRAGVGLLEVVLEPDMSCGEEAATAVRELQLILQALGTSQANMAEQLRVDANISVHHPGPELGVRETVK
 NLNSIRFLAKAIDYEIQRQINLENGEILNETRSFHHKLGCTMSMRDKEGKQDYRFMPEPNLPLVLYD
 ATSLPAGADPQQVINIDQIRETLPELPSVTREKLVQQYGMILLEHSFTLLNEVGLLEFFQNVIKETRAEPK
 KVTSWVLNFTFLGYLKQQLAVSESPVTPSALAELLDLDSRTISSAAKQVFEELWKREGKTPGQIVSEK
 QLELMQDQGALEQLCHSVMEHPQVMDVKNRNPRAINKLIGLVRKATQSRADPVMIKEILEKLSL

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms:

https://cdn.origene.com/chromatograms/mk8116_a11.zip

Restriction Sites:

Sgfl-Mlul

Cloning Scheme:

ACCN: NM_004564

ORF Size: 1671 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_004564.3](#)
RefSeq Size: 2233 bp

RefSeq ORF: 1674 bp

Locus ID: 5188

UniProt ID: [O75879](#)

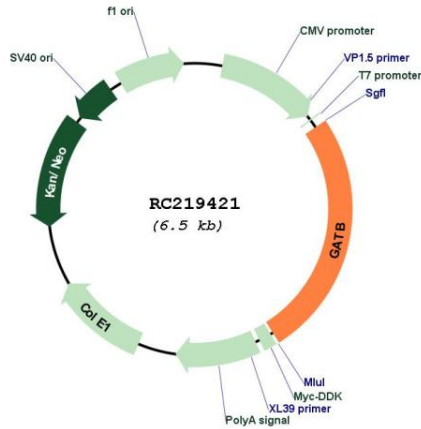
Cytogenetics: 4q31.3

Domains: GatB_Yqey, GatB_N, GatB

MW: 61.9 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 RC219421