

Product datasheet for **SC117282**

PET112L (GATB) (NM_004564) Human Untagged Clone

Product data:

Product Type:	Expression Plasmids
Tag:	Tag Free
Symbol:	PET112L
Synonyms:	COXPD41; HSPC199; PET112; PET112L
Mammalian Cell	None
Selection:	
Vector:	<u>pCMV6-XL6</u>
E. coli Selection:	Ampicillin (100 ug/mL)



Fully Sequenced ORF:

>OriGene ORF within SC117282 sequence for NM_004564 edited (data generated by NextGen Sequencing)

ATGGCGGCGCCCATGCTGCGCTGGGGCTGCCGTGGAAGACGTTGGGCTTTCGCCCGGGTT
GACGGTGGTTCTTCCACCGAAGAGGGGCTCCGACTGGGTCCACATCCAACCAGATTAGG
GGAGAGAGCTCAGTGGCTCAGCAGCCCTCCACACGGCCAGAAAGCAGGAAAGGTGAA
CACAAATGGGCTGCTGTGGTAGGTTTGAAATTCATGCCCAGATTTCCTCCAACCTCTAAA
CTCTTCTCTGGATCTCAAGTTCGCTTTTCAGCACCTCCAAATCTTTGGTTTCTTTTTT
GATGCATCTCTACCTGGAACTTTGCCGGTTCTCAACAGGAGGTGTGTAGAAGCGCGGTG
ATGACAGGCCTGGCTCTGAACTGCCACATAAAACAAGAAGTCCTTGTGTTGACAGGAAGCAC
TACTTCTATGCAGACCTCCCTGCAGGCTACCAATTACCCAGCAGAGGCTCCCAATTGCT
GTGAATGGGAGCTTGATATATGGCGTCTGTGCAGGGAAGAAGCAGAGTCAGGTGATCCCC
AAGACGGTGAGGATCAAGCAGATCCAGTTGGAGCAAGACAGTGGCAAAAGCCTCCACGAC
AACCTGAGGTCTCAGACGCTCATTGATTTGAACAGGGCAGGAGTGGGCCTTCTGGAGGTG
GTCCTGGAGCCGACATGTCCTGTGGAGAAGAGCGGCAACAGCTGTCAGGGAGCTGCAG
CTGATCCTTCAAGCCCTGGGACCAAGCCAGGCAACATGGCAGAGGGCCAGTTGAGAGTG
GATGCCAATATATCCGTGCATCACCTGGGGAGCCTTTGGGCGTTTCAACGGAAGTGAAG
AATCTCAACAGCATCAGGTTCTGGCCAAAGCCATAGACTATGAAATTCAGAGGCAAATC
AATGAACCTTGAGATGGAGGTGAAATCTGAACGAAACACGCTCATTTCATCACAAGCTG
GGGTGACCATGTCAATGAGAGACAAAGAGGAAAACAGGACTACAGTTTCATGCCAGAA
CCCAACCTGCCTCCCTGGTGCTCTACGACGCCACATCTCTGCCCGCAGGTGCAGACCCA
CAGCAAGTGATCAATATTGACCAGATTGCGGAGACACTCCCGAGCTCCCAAGTGTGACC
CGAGAGAAGCTTGTCCAACAGTATGGGATGCTGCTGGAACACAGCTTCACTTTGCTGAAC
GAAGTCGGCTACTGGAGTTCTTCCAAAATGTGATAAAAGAACTAGGGCAGAGCCAAAA
AAGGTGACTAGTTGGGTCTCAACACTTTTCTGGGCTATTTAAAGCAACAGAACCTCGCT
GTCAGTGAAAGTCTGTACACCCCTCTGCACTCGCTGAGCTTCTTGACCTGCTGGACAGC
AGAACAATTTCTTCATCAGCAGCTAAACAGGTGTTTGAGGAACTGTGGAAGAGGGAAGGC
AAGACTCCAGGGCAGATTGTTTCAGAAAAGCAGCTTGAAGTATGCAGGACCAAGGGGCA
CTGGAGCAGCTCTGCCACTCTGTGATGGAGGCCATCCTCAAGTGTAATGGATGTGAAG
AACAGAAACCCAGAGCTATAAATAAACTGATTGGGTTGGTCCGGAAGCGACTCAAAGC
CGAGCAGATCCAGTCATGATAAAGGAGATCCTGGAGAAGAAGCTGTCATTGTGA

Clone variation with respect to NM_004564.2
1329 g=>a

**5' Read Nucleotide
Sequence:**

>OriGene 5' read for NM_004564 unedited

AATTACCCGCCGTTGAAGCAATGGGCGGTAGGCGTGTACGGTGGGAGGTCTATATAAGC
AGAGCTCATTTAGGTGACACTATAGAATACAAGCTACTTGTTCTTTTGCAGCGGCCGCG
AATTCGGCAGCAGGTGGAGTTACAATGGCGGCCCATGCTGCGCTGGGGCTGCCGTGGA
AGACGTTGGGCTTTCGCCCGGGTTGACGGTGGTTCTTGCCACCGAAGAGGGGCTCCGACT
GGGTCCACATCCAACCAGATTAGGGGAGAGAGCTCAGTGGCTCAGCAGCCCTCCACACG
GCCAGAAAGCAGGAAAGGTGAACACAAATGGGCTGCTGTGGTAGGTTTGAAATTCAT
GCCCAGAGTTCTCCAACCTCTAACTCTTCTCTGGATCTCAAGTTCGCTTTTCAGCACCT
CCAAATTTCTTGTTTCTTTTTTGTGATGCATCTCTACCTGGAACTTTGCCGGTTCTCAAC
AGGAGGTGTGTAGAAGCGGCGGTGATGACAGGCCTGGCTCTGAAGTCCACATAAAACAAG
AAGTCCTTGTTGACAGGAAGCACTACTTCTATGCAGACCTCCCTGCAGGCTACCAAAAT
ACCCAGCAGAGGCTCCCAATTGCTGTGAATGGGAGCTTGATATATGGCGTCTGTGCAGGG
AAGAAGCAGAGTCAGGTGATCCTCTAGAGGTTGAGGATCAAAGCAGATCCCAAGTTGGAGC
AAGACAGTGGCAAAAGCCTCCCGACACCTGAGGTCTCAGACGCTCATTGATTGACCAGG
CCCGAAGTGGCCTCTGGTGAGGGGGGCGCTGGAGCCCCACTGCCCTGGTGGACAAAAGG
GGGGTACAGTTTGTAGGGAGCTGGCCCTTGACCTTCCAGCCCTTGGGAGCAGCCAGG
CAGCAGGTCAGAGGCCCACTTGCAAAA

3' Read Nucleotide Sequence:	>OriGene 3' read for NM_004564 unedited <pre> AACAGNATCTCCTAATACATTTTATTTAGGGGAAAATGGGGGGACAAGAAGGTGTTACT CCTTGGGCACTGCTGCAGCCTCACCGGACCCTCCTGATGTGGATGAAGCAGCGGGGTGG CTGCTGGTCGGCTGTGGAGGCACCTNCAGGCACAGGGTCCTTAAATGTGAGAACAAGTGGT GACATTGGTGCGGTAGCTGTGGCTTGGGACAGGATTGAGAGGCAGCTTTCAGGGCACAT GGGTATTAGCTTTCACAGGATCCTGTTCCAGTCAGGCTGCACTGTTTGTGTTGTTCTT TGGGCAAGGGGATCCAAACATTTTACAATGACAGCTTCTTTTTCAGGATCTCCTTTATC ATGACTGGATCTCGCGGGNAGGAAACGGAAACCGGACCAACCCAAACACGTTATATAC TAGCCTGGGGGTTGTGGGGTCAAATACATTACCACTTGAGGATTGGCCTTCAGGGAATG CGTGGCCAAATTTGTCTGTGCCCCCTGGTCGCGGTTTAGGGCAATGCTTTTCTCTGCAA CATCGGCGCCCCGAGCGTTGGGGGTGCCCTTTTCAGAAATGCCCGTAAACCGGCGTA CTTGCTGAAGGAAGAAATTGTGTTCTTGTCCAGCTGCTCAAATATATTTAGGGAGGTGG CCCGGGGGTTAAAGGATTCTTACCTTCTACGATGTTTTTGTGTTGATGTGGCTAGA ACACATGTTGCGGGGCCCGCGGGTCCGCTTTTGCAGCTGGCCCTTTGTATCTTGA TAACCATGGTGGGGCCAATCCGTGCCGCGCGTCGGGGCGGCGACCGCCCGCGGCGG </pre>
Restriction Sites:	NotI-NotI
ACCN:	NM_004564
Insert Size:	2150 bp
OTI Disclaimer:	Our molecular clone sequence data has been matched to the reference identifier above as a point of reference. Note that the complete sequence of our molecular clones may differ from the sequence published for this corresponding reference, e.g., by representing an alternative RNA splicing form or single nucleotide polymorphism (SNP).
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:	<u>NM_004564.1</u> , <u>NP_004555.1</u>
RefSeq Size:	2044 bp
RefSeq ORF:	1674 bp
Locus ID:	5188
UniProt ID:	<u>O75879</u>

Cytogenetics: 4q31.3

Domains: GatB_Yqey, GatB_N, GatB

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]

Transcript Variant: This variant (1) represents the longer transcript and encodes the longer isoform (1). Sequence Note: This RefSeq record was created from transcript and genomic sequence data to make the sequence consistent with the reference genome assembly. The genomic coordinates used for the transcript record were based on transcript alignments.