

Product datasheet for **RR215983**

Agxt (NM_001270659) Rat Tagged ORF Clone

Product data:

Product Type: Expression Plasmids
Product Name: Agxt (NM_001270659) Rat Tagged ORF Clone
Tag: Myc-DDK
Symbol: Agxt
Synonyms: AGT; Spat; SPT
Vector: pCMV6-Entry (PS100001)
E. coli Selection: Kanamycin (25 ug/mL)
Cell Selection: Neomycin
ORF Nucleotide Sequence: >RR215983 representing NM_001270659
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**GCGATCGCC**

ATGCCCCACCAGGGATCTCCCTCATCTCCTTCAACGACAAGGCCAAATCCAAAGTCTACTCCCGAAGAC
AAAGCCAGTCTCCTTCTACACAGACATCACTTATTTGTCCAAGTTGTGGGGCTGTGAGGGCAAGACCAGA
GTGTTCTTTTCTATTCCCAGAATTCATCATACTGCTGCCTGTCATCAGCTTATACTGCCTGAGGGAGAGC
CTAGCACTCATTTAGAGCAGGGCTGGAGAATTCCTGGCGGCGTCACAGGGAGGCTACAGCACATCTGC
ACAAGTGCCTGCGGGAGTTGGGCTTAAAGTTCTTTGTGAAGGACCCGAAATCCGGCTACCTACAATCAC
CACCGTGACCGTGCCTGCCGGCTACAACGGAGGGACATCGTCAGCTACGTGCTGGACCACTTCAACATT
GAAATCTCTGGTGGTCTTGGGCCCTCTGAGGATAAGGTGCTGCGGATTGGCCTCTGGGCTACAACGCCA
CCACAGAGAATGCGGACCGTGTAGCGGAGGCCCTGAGGGAGGCCCTGCAACATTGTCTAAGAATAAATT
G

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence: >RR215983 representing NM_001270659
Red=Cloning site Green=Tags(s)

MPHQGSPSSPSTTRPNPKSTPGRQSQSPSTQTSLICPCSGAVRARPECSFLFPRIHHTLPVISLYCLRES
LALISEQGLENSWRRHREATAHLHKCLRELGLKFFVKDPEIRLPTITTVTPAGYNWRDIVSYVLDHFNI
EISGGLGPSEDKVLRIGLLGYNATTENADRVAEALREALQHCPKNKL

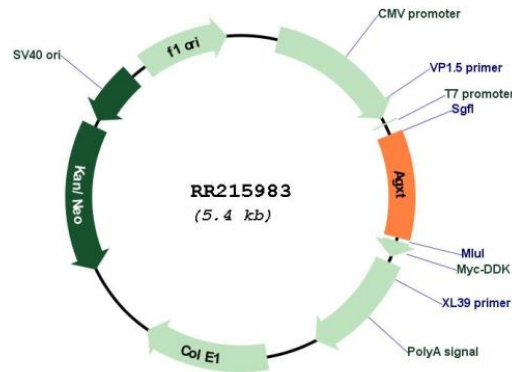
TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Restriction Sites: SgfI-MluI



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Cloning Scheme:

Plasmid Map:


ACCN: NM_001270659

ORF Size: 561 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_001270659.1](#), [NP_001257588.1](#)

RefSeq Size: 957 bp

RefSeq ORF: 564 bp

Locus ID: 24792

Cytogenetics: 9q36

MW: 20.8 kDa

Gene Summary: This gene encodes alanine-glyoxylate aminotransferase, which catalyzes the interconversion of L-alanine and glyoxylate to pyruvate and glycine. Two alternatively spliced transcript variants encoding distinct isoforms have been found for this gene. The longer transcript variant includes an upstream translation start codon and a downstream translation start codon. The upstream start codon initiates the translation of the mitochondrial enzyme precursor while the downstream start codon initiates the translation of the peroxisomal enzyme (see PMID:2332438). [provided by RefSeq, Feb 2013]