

Product datasheet for **RG219357**

AGXT2 (NM_031900) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	AGXT2 (NM_031900) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	AGXT2
Synonyms:	AGT2; BAIBA; DAIBAT
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)



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ORF Nucleotide Sequence:

>RG219357 representing NM_031900
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGCATCGCC**

ATGACTCTAATCTGGAGACATTTGCTGAGACCCTTGTGCCTGGTCACTTCCGCTCCAGGATCCTTGAGA
 TGCATCCTTTCTGAGCCTAGGTACTTCCCGGACATCAGTAACCAAGCTCAGTCTTCATACAAAGCCCAG
 AATGCCTCCATGTGACTTCATGCCTGAAAGATACCAGTCCCTTGCTACAAACCGTCTCGGAAATCCAC
 AAGGAACATCTTCTCCTGTGGTGACGGCATATTTCCAGAAACCCTGCTGCTCCACCAGGGGCACATGG
 AGTGGCTCTTTGATGCTGAAGGAAGCAGATACCTGGATTTCTTTCCGGGATTGTTACTGTCAGTGTGG
 CCATTGCCACCCAAAGGTGAATGCAGTGGCAGAAAGCAGCTCGGCCGCTGTGGCATAACAAGCACCGTC
 TTCTCCACCCTCAATGCATGAATATGCAGAGAAGCTTGCCGCCTTCTCCTGAGCCTCTTAAGGTCA
 TTTTCTTGGTGAACAGTGGCTCAGAAGCCAATGAGCTGGCCATGCTGATGGCCAGGGCGCACTCAAACAA
 CATAGACATCATTCTTTCCAGAGGAGCCTACCATGGATGCAGTCTTACACACTTGGCTTGACAAACGTA
 GGGACCTACAAGATGAACTCCCTGGTGGGACAGGTTGCCAACCAACAATGTGTCCAGATGTTTTTCGTG
 GCCCTTGGGGAGGAAGCCACTGTCGAGATTCTCCAGTGCACAAACAATCAGGAAGTGCAGCTGTGCACCAGA
 CTGCTGCCAAGCTAAAGATCAGTATATTGAGCAATTCAAAGATACGCTGAGCACATCTGTGGCCAAGTCA
 ATTGCTGGATTTTTCGCAGAACCATTCAAGGTGTGAATGGAGTTGTCCAGTACCCAAAGGGTTTCTAA
 AGGAAGCCTTTGAGCTGGTGCAGCAAGGGGAGGCGTGTGCATTGCAGATGAAGTGCAGACAGGATTTGG
 AAGTTGGGCTCTCACTTCTGGGCTTCCAACCACGATGTCTGCCTGACATTGTCACCATGGCTAAA
 GGGATTGGGAATGGCTTCCCATGGCAGCAGTCAACCACTCCAGAGATTGCCAAATCTTTGGCGAAAT
 GCCTGCAGCACTCAACACCTTTGGAGGGAACCCATGGCTGTGCCATTGGATCTGCTGTGCTTGAAGT
 GATTAAGAAGAAAATCTACAGGAAAACAGTCAAGAAAGTTGGGACCTACATGTTACTAAAGTTTGCCTAAG
 CTGCGGGATGAATTTGAAATTGTTGAGACGTCAGGCAAGGTCTCATGATAGGCATAGAAATGGTGC
 AGGATAAGATAAGCTGTCGGCTCTTCCCGTGAAGAAGTAAATCAGATCCATGAGGACTGCAAGCACAT
 GGGACTCCTCGTTGGCAGAGGCAGCATTCTTCTCAGACATTTGCATTGCGCCCTCAATGTGCATCACT
 AAACCAGAAGTTGATTTGCAGTAGAAGTATTTCTGCTTCTGCCTAACCCAACACATGAAAGAAGAGCTA
 AG

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

Protein Sequence:

>RG219357 representing NM_031900
 Red=Cloning site Green=Tags(s)

MTLIWRHLLRPLCLVTSAPRILEMHPFLSLGTSRTSVTKLSLHTKPRMPPCDFMPERYQSLGYNRVLEIH
 KEHLSPVVTAYFQKPLLLHQGHMEWLFDAEGSRYLDFSGIVTVSVGHCHPKVNAVAQKQLGRLWHTSTV
 FFHPPMHEYAEKLAALLPEPLKVIFLVNSGSEANELAML MARAHSNNIDIISFRGAYHGCSPYTLGLTNV
 GTYKMELPGGTGCQPTMCPDVFVRGPWGGSHCRDSPVQTIKRCSCAPDCCQAKDQYIEQKFDLSTVAKS
 IAGFFAEPIQGVNGVVQYPKFLKEAFELVRARGGVCI ADEVQTFGRLGSHFWGFQTHDVLDPDIVTMAK
 GIGNGFPMAAVITTP EIAKSLAKCLQHFNTFGGNPMACAIGSAVLEVIKEENLQENSQEVGTMYMLLKFAK
 LRDEF EIVGDVRGKGLMIGIEMVQDKISCRPLPREEVNQIHEDCKHMGLLVGRGSIFSQTFRIAPSMCIT
 KPEVDFAVEVFRSALTQHMERRAK

TRTRPLE - GFP Tag - V

Restriction Sites:

Sgfl-Mlul

Cloning Scheme:


ACCN: NM_031900

ORF Size: 1542 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_031900.4](#)

RefSeq Size: 2165 bp

RefSeq ORF: 1545 bp

Locus ID: 64902

UniProt ID: [Q9BYV1](#)

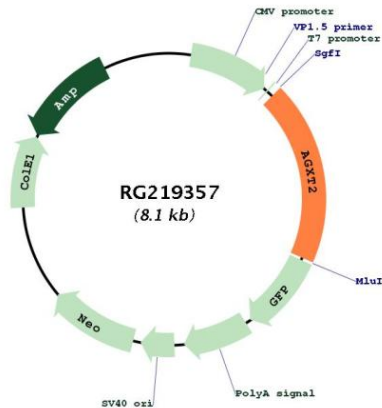
Cytogenetics: 5p13.2

Protein Families: Druggable Genome

Protein Pathways: Alanine, aspartate and glutamate metabolism

Gene Summary: The protein encoded by this gene is a class III pyridoxal-phosphate-dependent mitochondrial aminotransferase. It catalyzes the conversion of glyoxylate to glycine using L-alanine as the amino donor. It is an important regulator of methylarginines and is involved in the control of blood pressure in kidney. Polymorphisms in this gene affect methylarginine and beta-aminoisobutyrate metabolism, and are associated with carotid atherosclerosis. Alternative splicing results in multiple transcript variants. [provided by RefSeq, Apr 2015]

Product images:



Circular map for RG219357