

Product datasheet for **RC219357**

AGXT2 (NM_031900) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	AGXT2 (NM_031900) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	AGXT2
Synonyms:	AGT2; BAIBA; DAIBAT
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



[View online »](#)

ORF Nucleotide Sequence:

>RC219357 representing NM_031900
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGGATCGCC**

ATGACTCTAATCTGGAGACATTTGCTGAGACCCTTGTGCCTGGTCACTTCCGCTCCAGGATCCTTGAGA
 TGCATCCTTTCTGAGCCTAGGTACTTCCCGGACATCAGTAACCAAGCTCAGTCTTCATACAAAGCCCAG
 AATGCCTCCATGTGACTTCATGCCTGAAAGATACCAGTCCCTTGCTACAAACCGTCTCGGAAATCCAC
 AAGGAACATCTTCTCCTGTGGTACGGCATATTTCCAGAAACCCTGCTGCTCCACCAGGGGCACATGG
 AGTGGCTCTTTGATGCTGAAGGAAGCAGATACCTGGATTTCTTTCCGGGATTGTTACTGTCAGTGTGG
 CCATTGCCACCCAAAGGTGAATGCAGTGGCAGAAAGCAGCTCGGCCGCTGTGGCATAACAACCCGCTC
 TTCTCCACCCTCAATGCATGAATATGCAGAGAAGCTTGCCGCCTTCTCCTGAGCCTCTTAAGGTCA
 TTTTCTGGTGAACAGTGGCTCAGAAGCCAATGAGCTGGCCATGCTGATGGCCAGGGCGCACTCAAACAA
 CATAGACATCATTCTTTCCAGAGGAGCCTACCATGGATGCAGTCTTACACACTTGGCTTGACAAACGTA
 GGGATCTACAAGATGAACTCCCTGGTGGGACAGGTTGCCAACCAACAATGTGTCCAGATGTTTTCGTG
 GCCCTTGGGGAGGAAGCCACTGTCGAGATTCTCCAGTGCACAAACAATCAGGAAGTGCAGCTGTGCACCA
 CTGCTGCCAAGCTAAAGATCAGTATATTGAGCAATTCAAAGATACGCTGAGCACATCTGTGGCCAAGTCA
 ATTGCTGGATTTTTCGCAGAACCATTCAAGGTGTGAATGGAGTTGTCCAGTACCCAAAGGGGTTTCTAA
 AGGAAGCCTTTGAGCTGGTGCAGCAAGGGGAGGCGTGTGCATTGCAGATGAAGTGCAGACAGGATTTGG
 AAGTTGGGCTCTCACTTCTGGGCTTCCAACCACGATGTCTGCCTGACATTGTCACCATGGCTAAA
 GGGATGGGAATGGCTTCCCATGGCAGCAGTCAACCACTCCAGAGATTGCCAAATCTTTGGCGAAAT
 GCCTGCAGCACTTCAACACCTTTGGAGGGAACCCATGGCCTGTGCCATTGGATCTGCTGTGTTGAGGT
 GATTAAGAAGAAAATCTACAGGAAAACAGTCAAGAAAGTTGGGACCTACATGTTACTAAAGTTTGTAAAG
 CTGCGGGATGAATTTGAAATTGTTGAGACGCTCCGAGGCAAGGCCTCATGATAGGCATAGAAATGGTGC
 AGGATAAGATAAGCTGTCGGCCTCTTCCCGTGAAGAAGTAAATCAGATCCATGAGGACTGCAAGCACAT
 GGGACTCCTCGTTGGCAGAGGCAGCATTTTTTCTCAGACATTTGCATTGCGCCCTCAATGTGCATCACT
 AAACCAGAAGTTGATTTGCAGTAGAAGTATTTCTGCTTCTGCCTTAAACCAACACATGAAAGAAGAGCTA
 AG

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence:

>RC219357 representing NM_031900
 Red=Cloning site Green=Tags(s)

MTLIWRHLLRPLCLVTSAPRILEMHPFLSLGTSRTSVTKLSLHTKPRMPPCDFMPERYQSLGYNRVLEIH
 KEHLSVVVYAYFQKPLLLHQGHMEWLFDAEGSRYLDFSGIVTVSVGHCHPKVNAVAQKQLGRLWHTSTV
 FFHPPMHEYAEKLAALLPEPLKVI FLVNSGSEANELAML MARAHSNNIDIISFRGAYHGCSPYTLGLTNV
 GIYKME LPGGTGCQPTMCPDVFVRGPWGGSHCRDSPVQTIKRCSCAPDCCQAKDQYIEQFKD LSTVAKS
 IAGFFAEPIQGVNGVVQYPKGFLEAFELVRARGGVCI ADEVQTFGRLGSHFWGFQTHDVL PDIVTMAK
 GIGNGFPMAAVITTP EIAKSLAKCLQHFNTFGGNPMACAIGSAVLEVIKEENLQENSQEVGTYMLLKFAK
 LRDEFEIVGDVRGKGLMIGIEMVQDKISCRPLPREEVNQIHEDCKHMGLLVGRGSIFSQTFRIAPSMCIT
 KPEVDFAVEVFRSALTQHMERRAK

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms:

https://cdn.origene.com/chromatograms/mg3328_e05.zip

Restriction Sites:

Sgfl-MluI

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

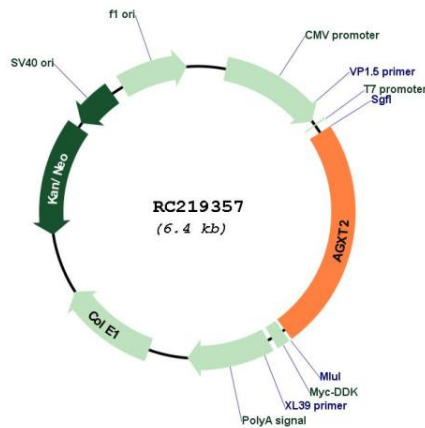
Protein Families: Druggable Genome

Protein Pathways: Alanine, aspartate and glutamate metabolism

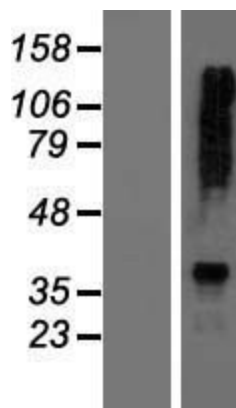
MW: 52.4 kDa

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]

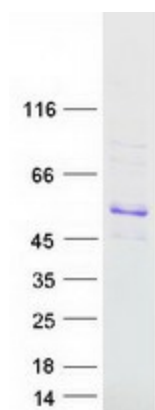
Product images:



Circular map for RC219357



Western blot validation of overexpression lysate (Cat# [LY410447]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC219357 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified AGXT2 protein (Cat# [TP319357]). The protein was produced from HEK293T cells transfected with AGXT2 cDNA clone (Cat# RC219357) using MegaTran 2.0 (Cat# [TT210002]).