

## Product datasheet for **RC228276**

### Aminomethyltransferase (AMT) (NM\_001164711) Human Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	Aminomethyltransferase (AMT) (NM_001164711) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Aminomethyltransferase
Synonyms:	GCE; GCST; GCVT; NKH
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>RC228276 representing NM_001164711 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCC**CGATCGCC**

ATGCAGAGGGCTGTAAGTGTGGTGGCCGCTCTGGGCTTTCGCCTGCAGGCATTCCCCCGGCCTTGTGTC  
GTCCACTTAGTTGCGCACAGACCAAGATACTTGGTAGTGACCGGGTGAAGCTGATGGAGAGTCTAGTGGT  
TGGAGACATTGCAGAGCTAAGACCAAACCAGGGGACACTGTCGCTGTTTACCAACGAGGCTGGAGGCATC  
TTAGATGACTTGATTGTAACCAATACTTCTGAGGGCCACCTGTATGTGGTGTCCAACGCTGGCTGCTGGG  
AGAAAGATTTGGCCCTCATGCAGGACAAGGTCAAGGAGCTTCAGAACCAGGGCAGAGATGTGGCCCTGGA  
GGTGTGGATAATGCCCTGCTAGCTCTGCAAGGCCCACTGCAGCCAGGTAACAGGCCGGCGTGGCA  
GATGACCTGAGGAACTGCCCTTCATGACCAGTGTGTATGGAGGTGTTTGGCGTGTCTGGCTGCCGCG  
TGACCCGCTGTGGCTACACAGGAGAGGATGGTGTGGAGATCTCGGTGCCGGTAGCGGGGGCAGTTACCT  
GGCAACAGCTATTCTGAAAAACCCAGAGGTGAAGCTGGCAGGGCTGGCAGCCAGGGACAGCCTGCGCCTG  
GAGGCAGGCCTCTGCCTGTATGGGAATGACATTGATGAACACACTACCTGTGGAGGGCAGCCTCAGTT  
GGACACTGGGGAAGCGCCGCGAGCTGCTATGGACTTCCCTGGAGCCAAGGTCATTGTTCCCAAGCTGAA  
GGGCAGGGTGCAGCGGAGCGTGTGGGTTGATGTGTGAGGGGGCCCCATGCGGGCACACAGTCCCATC  
CTGAACATGGAGGTTACCAAGATTGGTACTGTGACTAGTGGCTGCCCTCCCCCTCTCTGAAGAAGATG  
TGGCGATGGGTTATGTGCCCTGCGAGTACAGTCTCCAGGGACAATGCTGCTGGTAGAGGTGCGCGGAA  
GCAGCAGATGGCTGTAGTCAGCAAGATGCCCTTTGTGCCACAACTACTATACCCTCAAG

**ACGCGT**ACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAATGATATCCTGGATT  
ACAAGGATGACGACGATAAGGTTTAA



[View online »](#)

**Protein Sequence:** >RC228276 representing NM\_001164711  
Red=Cloning site Green=Tags(s)

MQRAVSVVARLGFRLQAFPPALCRPLSCAQTKILGSDRVKLMESLVVGDIAELRPNQGTLSLFTNEAGGI  
 LDDLIVTNTSEGLHYVVSNAGCWEKDLALMQDKVRELQNQGRDVGLEVLNALLALQGPTAAQVLQAGVA  
 DDLRKLPMFMSAYMEVFGVSGCRVTRCGYTGEDGVEISVPVAGAVHLATAILKNPEVKLAGLAARDSLRL  
 EAGLCLYGNDIDEHTTPVEGSLSWTLGKRRRAAMDFPGAKVIVPQLKGRVQRRRVGLMCEGAPMRAHSPI  
 LNMEGTKIGTVTSGCPSPLKKNVAMGYVPCYSRPGTMLLVEVRRKQQMAVVSMPFVPTNYYTLK

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

**Chromatograms:** [https://cdn.origene.com/chromatograms/ja1287\\_e03.zip](https://cdn.origene.com/chromatograms/ja1287_e03.zip)

**Restriction Sites:** SgfI-MluI

**Cloning Scheme:**



**ACCN:** NM\_001164711

**ORF Size:** 1041 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\\_001164711.2](#)

**RefSeq ORF:** 1044 bp

**Locus ID:** 275

**UniProt ID:** [P48728](#)

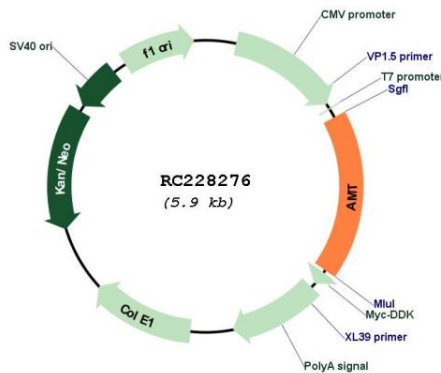
**Cytogenetics:** 3p21.31

**Protein Pathways:** Glycine, serine and threonine metabolism, Metabolic pathways, Nitrogen metabolism, One carbon pool by folate

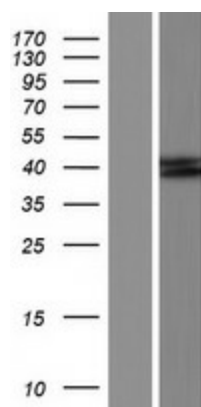
**MW:** 37.3 kDa

**Gene Summary:** This gene encodes one of four critical components of the glycine cleavage system. Mutations in this gene have been associated with glycine encephalopathy. Multiple transcript variants encoding different isoforms have been found for this gene. [provided by RefSeq, Sep 2011]

**Product images:**



Circular map for RC228276



Western blot validation of overexpression lysate (Cat# [LY431304]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC228276 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).