

## Product datasheet for **RG228308**

### Aminomethyltransferase (AMT) (NM\_001164712) Human Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	Aminomethyltransferase (AMT) (NM_001164712) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	AMT
Synonyms:	GCE; GCST; GCVT; NKH
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)
ORF Nucleotide Sequence:	>RG228308 representing NM_001164712 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCC**CGATCGCC**

ATGCAGAGGGCTGTAAGTGTGGTGGCCCGTCTGGGCTTTCGCCTGCAGGCATTCACCCCGGCCTTGTGTC  
GTCCACTTAGTTGCGCACAGGAGGTGCTCCGCAGGACACCGCTCTATGACTTCCACTGGCCACGGCGG  
GAAAATGGTGGCGTTTGGGGTTGGAGTCTGCCAGTGCAGTACCGGGACAGTCACTGACTCGCACCTG  
CACACACGCCAGCACTGCTCGCTTTGACGTGTCTCATATGCTGCAGACCAAGATACTTGGTAGTGACC  
GGGTGAAGCTGATGGAGAGTCTAGTGGTTGGAGACATTGCAGAGCTAAGACCAACCAGGGGACACTGTC  
GCTGTTTACCAACGAGGCTGGAGGCATCTAGATGACTTGATTGTAACCAATACTTCTGAGGGCCACCTG  
TATGTGGTGTCCAACGCTGGCTGCTGGGAGAAAGATTTGGCCCTCATGCAGGACAAGGTCAGGGAGCTTC  
AGAACCAGGGCAGAGATGTGGGCTGGAGGTGTTGGATAATGCCCTGCTAGCTCTGCAAGGCCCCACTGC  
AGCCCAGGTAACAGGCCGGCGTGGCAGATGACCTGAGGAACTGCCCTTCATGACCAGTGCTGTGATG  
GAGGTGTTGGCGTGTCTGGCTGCCCGGTGACCCGCTGTGGCTACACAGGAGAGGATGGTGTGGAGATCT  
CGGTGCCGGTAGCGGGGGCAGTTCACCTGGCAACAGCTATTCTGAAAAACCCAGAGGTGAAGCTGGCAGG  
GCTGGCAGCCAGGGACAGCCTGCGCCTGGAGGCAGGCCCTGCTGTATGGGAATGACATTGATGAACAC  
ACTACACTGTGGAGGGCAGCCTCAGTTGGACTGGGAAGCGCCGAGCTGCTATGGACTTCCCTG  
GAGCCAAGGTCATTGTTCCCGAGCTGAAGGGCAGGGTGCAGCGAGGCGTGTGGGTTGATGTGTGAGGG  
GGCCCCATGCGGGCACACAGTCCCATCTGAACATGGAGGGTACCAAGATTGGTACTGTGACTAGTGGC  
TGCCCCCTCCCCTCTCTGAAGAAGAATGTGGCGATGGGTTATGTGCCCTGCGAGTACAGTCGTCCAGGGA  
CAATGCTGCTGGTAGAGCTTCCTCAGGACCCTGCTTC

**ACGCGT**ACGCGGGCCGCTCGAG - GFP Tag - GTTTAA



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**Protein Sequence:** >RG228308 representing NM\_001164712  
 Red=Cloning site Green=Tags(s)

MQRAVSVVARLGFRLQAFPPALCRPLSCAQEVLRRTPLYDFHLAHGGKMVAFAGWSLPVQYRDSHTDSSL  
 HTRQHCSLFDVSHMLQTKILGSDRVKLMESLVVGDIAELRPNQGTLSLFTNEAGGILDDLIVTNTSEGL  
 YVVSNAGCWEKDLALMQDKVRELQNGRDVGLVLDNALLALQGPTAAQVLQAGVADDLRKLPFMTSAVM  
 EVFVSGRCRVTRCGYTGEDGVEISVPVAGAVHLATAILKNPEVKLAGLAARDSLRLEAGLCLYNDIDEH  
 TTPVEGSLSWTLGKRRRAAMDFPGAQVIIPQLKGRVQRRRVGLMCEGAPMRAHSPILNMEGTKIGITVTS  
 CPSPSLKKNVAMGYVPCYSRPGTMLLVELPSGPCF

TRTRPLE - GFP Tag - V

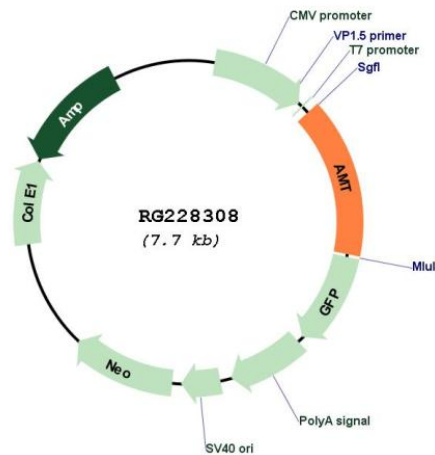
**Restriction Sites:**

SgfI-MluI

**Cloning Scheme:**



**Plasmid Map:**



**ACCN:**

NM\_001164712

<b>ORF Size:</b>	1158 bp
<b>OTI Disclaimer:</b>	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. <a href="#">More info</a>
<b>OTI Annotation:</b>	This clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.
<b>Components:</b>	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).
<b>Reconstitution Method:</b>	<ol style="list-style-type: none"><li>1. Centrifuge at 5,000xg for 5min.</li><li>2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.</li><li>3. Close the tube and incubate for 10 minutes at room temperature.</li><li>4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom.</li><li>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.</li></ol>
<b>RefSeq:</b>	<a href="#">NM_001164712.2</a>
<b>RefSeq Size:</b>	1955 bp
<b>RefSeq ORF:</b>	1161 bp
<b>Locus ID:</b>	275
<b>UniProt ID:</b>	<a href="#">P48728</a>
<b>Cytogenetics:</b>	3p21.31
<b>Protein Pathways:</b>	Glycine, serine and threonine metabolism, Metabolic pathways, Nitrogen metabolism, One carbon pool by folate
<b>Gene Summary:</b>	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]