

Product datasheet for **RG228289**

Aminomethyltransferase (AMT) (NM_001164710) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Aminomethyltransferase (AMT) (NM_001164710) 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:	>RG228289 representing NM_001164710 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGCAGAGGGCTGTAAGTGTGGTGGCCGCTCTGGGCTTTCGCCTGCAGGCATTCCCCCGGCCTTGTGTC
GTCCACTTAGTTGCGCACAGGAGGTGCTCCGCAGGACACCGCTCTATGACTTCCACCTGGCCACGGCGG
GAAAATGGTGGCGTTTGGGGTTGGAGTCTGCCAGTGCAGTACCGGGACAGTCACTACTGCTCGCACCTG
CACACACGCCAGCACTGCTCGCTCTTGGAGTGTCTCATATGCTGCAGACCAAGATACTTGGTAGTGACC
GGGTGAAGCTGATGGAGAGTCTAGTGGTTGGAGACATTGCAGAGCTAAGACCAAACCAGGACAAGGTCAG
GGAGCTTCAGAACCAGGGCAGAGATGTGGGCCTGGAGGTGTTGGATAATGCCCTGCTAGCTCTGCAAGGC
CCCACTGCAGCCAGGTAACAGGCGCGCTGGCAGATGACCTGAGGAACTGCCCTTCATGACCAGTG
CTGTGATGGAGGTGTTTGGCGTGTCTGGCTGCCGCGTGACCCGCTGTGGCTACACAGGAGAGGATGGTGT
GGAGATCTCGGTGCCGTAGCGGGGCGAGTTCACCTGGCAACAGCTATTCTGAAAAACCCAGAGGTGAAG
CTGGCAGGGCTGGCAGCCAGGGACAGCTGCGCCTGGAGGCAGGCTCTGCCTGTATGGGAATGACATTG
ATGAACACTACACCTGTGGAGGGCAGCCTCAGTTGGACTGGGAAGCGCCCGGAGCTGCTATGGA
CTTCCCTGGAGCCAAGGTCATTGTTCCCCAGCTGAAGGGCAGGGTGCAGCGGAGGCGTGTGGGGTTGATG
TGTGAGGGGCCCCCATGCGGGCACACAGTCCCATCCTGAACATGGAGGGTACCAAGATTGGTACTGTGA
CTAGTGGCTGCCCTCCCTCTCTGAAGAAGAAATGTGGCGATGGGTTATGTGCCCTGCGAGTACAGTCTG
TCCAGGGACAATGCTGCTGGTAGAGGTGCGGCGGAAGCAGCAGATGGCTGTAGTCAGCAAGATGCCCTTT
GTGCCACAACTACTATACCCTCAAG

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA



[View online »](#)

Protein Sequence: >RG228289 representing NM_001164710
 Red=Cloning site Green=Tags(s)

MQRAVSVVARLGFRLQAFPPALCRPLSCAQEVLRRTPLYDFHLAHGGKMVAFAGWSLPVQYRDSHTDSSL
 HTRQHCSLFDVSHMLQTKILGSDRVKLMESLVVGDIAELRPNQDKVRELQNOGRDVGLEVLNALLALQG
 PTAAQVLQAGVADDLRKLPFMTSAVMEVFGVSGRCRVTRCGYTGEDGVEISVPVAGAVHLATAILKNPEVK
 LAGLAARDSLRLEAGLCLYGNDIDEHTTPVEGSLSWTLGKRRRAAMDFFGAKVIVPQLKGRVQRRRVGLM
 CEGAPMRAHSPILNMEGTKIGTVTSGCPSPLKKNVAMGYVPCYSRPGTMLLVEVRRKQMQMAMVSKMPF
 VPTNYYTLK

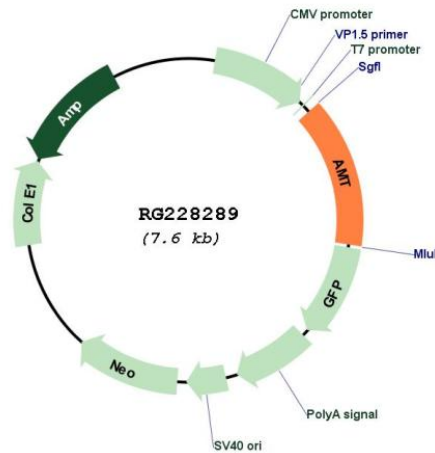
TRTRPLE - GFP Tag - V

Restriction Sites: SgfI-MluI

Cloning Scheme:



Plasmid Map:



ACCN: NM_001164710

ORF Size:	1077 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:	<ol style="list-style-type: none">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_001164710.2
RefSeq Size:	2083 bp
RefSeq ORF:	1080 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
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]