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Product datasheet for RG207497

GNMT (NM_018960) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	GNMT (NM_018960) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	GNMT
Synonyms:	HEL-S-182mP
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)

ORF Nucleotide Sequence:

>RG207497 representing NM_018960
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCCGCGATCGCC

ATGGTGGACAGCGTGTACCGGACCCGCTCCCTGGGGGTGGCGGCCGAAGGGCTCCCGGACCAGTACGCGG
ACGGGGAGGCGGCGCGCGTGTGGCAGCTGTATATCGGAGACACCCGCAGCCGCACCGCCGAGTACAAGGC
ATGGCTGCTTGGGCTGCTGCGCCAGCACGGCTGCCAGCGGGTGCTCGACGTAGCCTGTGGCACTGGGGTG
GACTCCATTATGCTGGTGGAAGAGGGCTTCAGTGTGACGAGTGTGGATGCCAGTGACAAGATGCTGAAGT
ATGCACTTAAGGAGCGCTGGAACCGGCGGCACGAGCCCGCCTTCGACAAGTGGGTCATCGAAGAAGCCAA
CTGGATGACTCTGGACAAAGATGTGCCCCAGTCAGCAGAGGGTGGCTTTGATGCTGTCATCTGCCTTGGA
AACAGTTTCGCTCACTTGCCAGACTGCAAAGGGGACCAGAGTGAGCACCGGCTGGCGCTGAAAAACATTG
CGAGCATGGTGCGGGCAGGGGGCCTACTGGTCATTGATCATCGCAACTACGACCACATCCTCAGTACAGG
CTGTGCACCCCCAGGGAAGAACATCTACTATAAGAGTGACTTGACCAAGGACGTCACAACATCAGTGCTG
ATAGTGAACAACAAGGCCCACATGGTGACCCTGGACTATACGGTGCAGGTGCCGGGGGCTGGCCAGGATG
GCTCTCCTGGCTTGAGTAAGTTCCGGCTCTCCTACTACCCACACTGTCTGGCATCCTTCACGGAGCTGCT
CCAAGCAGCCTTCGGAGGTAAGTGCCAGCACAGCGTCCTGGGCGACTTCAAGCCTTACAAGCCAGGCCAA
ACCTACATTCCCTGCTACTTCATCCACGTGCTCAAGAGGACAGAC

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

View online »

Protein Sequence:

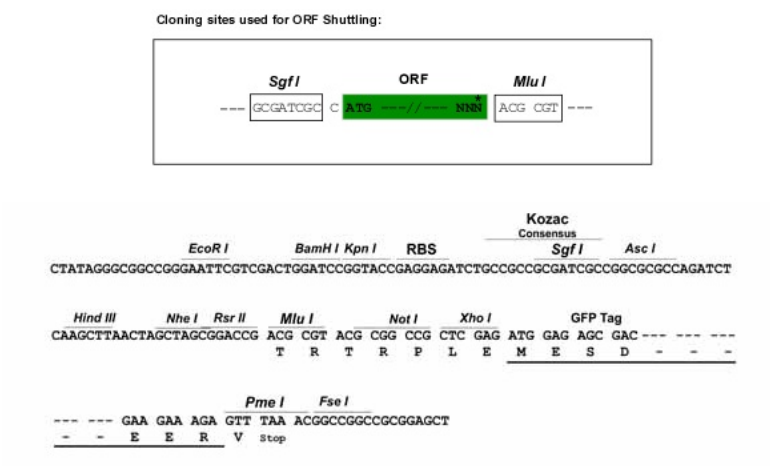
>RG207497 representing NM_018960
Red=Cloning site Green=Tags(s)

MVDSVYRTRSLGVAAEGLPDQYADGEAARVWQLYIGDTRSRTAEYKAWLLGLLRQHGCQRVLDVACGTGV
DSIMLVEEGFSVTSVDASDKMLKYALKERWNRRHEPAFDKWVIEEANWMTLDKDVPQSAEGGFDAVICLG
NSFAHLPDCKGDQSEHRLALKNIASMVRAGGLLVIDHRNYDHILSTGCAPPGKNIYYKSDLTKDVTTSVL
IVNNKAHMVTLDYTVQVPGAGQDGSPGLSKFRLSYYPHCLASFTELLQAAFGGKCQHSVLGDFKPYKPGQ
TYIPCYFIHVLKRTD

TRTRPLE - GFP Tag - V

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_018960

ORF Size: 885 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_018960.6

RefSeq Size: 1091 bp

RefSeq ORF: 888 bp

Locus ID: 27232

UniProt ID: Q14749

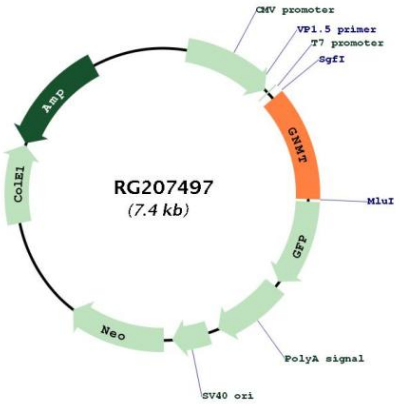
Cytogenetics: 6p21.1

Protein Families: Druggable Genome

Protein Pathways: Glycine, serine and threonine metabolism

Gene Summary: The protein encoded by this gene is an enzyme that catalyzes the conversion of S-adenosyl-L-methionine (along with glycine) to S-adenosyl-L-homocysteine and sarcosine. This protein is found in the cytoplasm and acts as a homotetramer. Defects in this gene are a cause of GNMT deficiency (hypermethioninemia). Alternative splicing results in multiple transcript variants. Naturally occurring readthrough transcription occurs between the upstream CNPY3 (canopy FGF signaling regulator 3) gene and this gene and is represented with GeneID:107080644. [provided by RefSeq, Jan 2016]

Product images:



Circular map for RG207497