

Product datasheet for **RG237657**

NAT1 (NM_001291962) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	NAT1 (NM_001291962) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	NAT1
Synonyms:	AAC1; MNAT; NAT-1; NATI
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)
ORF Nucleotide Sequence:	>RG237657 representing NM_001291962. Blue=ORF Red=Cloning site Green=Tag(s)

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GCTCGTTTGTAGTGAACCGTCAGAATTTTGTAAATACGACTCACTATAGGGCGCCGGGAATTCGTGACTG
GATCCGGTACCGAGGAGATCTGCCGCCGCGATCGCC
ATGCTGTATTACTCTTACACAAGGAGGAGCCCTCGAGCCACAGGGTCCAGCTGTTGGCTATAATAGC
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AAATACAGCACTGGCATGATTCACCTTCTCCTGCAGGTGACCATTGATGGCAGGAACATACATTGTGAT
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GAAGAAAATAGAAAAGTGTCTGAAAAATATATTTAATATTTCTTGCAGAGAAAGCTTGTGCCCAAACAT
GGTGATAGATTTTTTACTATT
ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAAAC
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Protein Sequence: >Peptide sequence encoded by RG237657
 Blue=ORF Red=Cloning site Green=Tag(s)

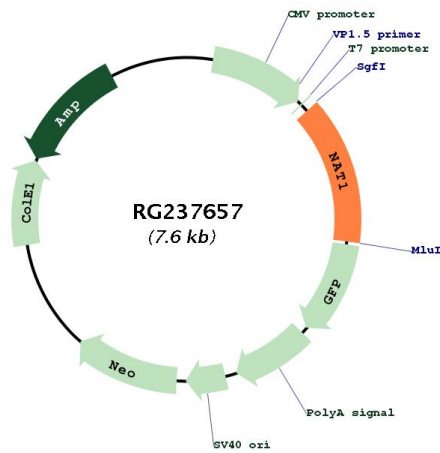
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 ERIGYKKSARNKLDLETLTDILQHQIRAVPFENLNIHCGDAMDLEAIFDQVRRNRGGWCLQVNHLLY
 WALTTIGFETTMLGGYVYSTPAKKYSTGMIHLLLQVTIDGRNYIVDAGFGRSYQMWQPLELISGKDQPQ
 VPCVFRLTEENGFWYLDQIRREQYIPNEEFHSDLLEDISKYRKIYSFTLKPRTIEDFESMNTYLQTS
 SVFTSKSFCSLQTPDGVHCLVGFVTLTHRRFNYKDNTDLIEFKTLSEEEIEKVLKNIFNISLQKLVPKH
 GDRFFTI
 TRTRPLEMESDESGLPAMEIECRITGTLNGVEFELVGGEGTPEQGRMTNKMSTKGALTFSPYLLSHV
 MGYGFYHFGTYPSTYENPFLHAINNGGYNTRIEKYEDGGVLHVSFSYRYEAGRVIGDFKVMGTGFPED
 SVIFTDKIIRSNATVEHLHPMGDNDLDGSFTRTFSLRDGGYSSVVDSHMHFKSAIHPSILQNGGPMFA
 FRRVEEDHSNTELGIVEYQHAFKTPDADAGEERV

Restriction Sites: SgfI-MluI

Cloning Scheme:



Plasmid Map:



ACCN:	NM_001291962
ORF Size:	1056 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).
RefSeq:	NM_001291962.2
RefSeq Size:	2143 bp
RefSeq ORF:	1059 bp
Locus ID:	9
Cytogenetics:	8p22
Protein Pathways:	Caffeine metabolism, Drug metabolism - other enzymes, Metabolic pathways
MW:	40.8 kDa
Gene Summary:	This gene is one of two arylamine N-acetyltransferase (NAT) genes in the human genome, and is orthologous to the mouse and rat Nat2 genes. The enzyme encoded by this gene catalyzes the transfer of an acetyl group from acetyl-CoA to various arylamine and hydrazine substrates. This enzyme helps metabolize drugs and other xenobiotics, and functions in folate catabolism. Multiple transcript variants encoding different isoforms have been found for this gene. [provided by RefSeq, Aug 2011]