**OriGene Technologies, Inc.**
9620 Medical Center Drive, Ste 200
Rockville, MD 20850, US
Phone: +1-888-267-4436
https://www.origene.com
techsupport@origene.com
EU: info-de@origene.com
CN: techsupport@origene.cn

# Product datasheet for RG209360

## NAT2 (NM_000015) Human Tagged ORF Clone

### Product data:

| | |
|---|---|
| **Product Type:** | Expression Plasmids |
| **Product Name:** | NAT2 (NM_000015) Human Tagged ORF Clone |
| **Tag:** | TurboGFP |
| **Symbol:** | NAT2 |
| **Synonyms:** | AAC2; NAT-2; PNAT |
| **Mammalian Cell Selection:** | Neomycin |
| **Vector:** | pCMV6-AC-GFP (PS100010) |
| **E. coli Selection:** | Ampicillin (100 ug/mL) |

**ORF Nucleotide Sequence:**

>RG209360 representing NM_000015
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCCGCGATCGCC

ATGGACATTGAAGCATATTTTGAAAGAATTGGCTATAAGAACTCTAGGAACAAATTGGACTTGGAAACAT
TAACTGACATTCTTGAGCACCAGATCCGGGCTGTTCCCTTTGAGAACCTTAACATGCATTGTGGGCAAGC
CATGGAGTTGGGCTTAGAGGCTATTTTTGATCACATTGTAAGAAGAAACCGGGGTGGGTGGTGTCTCCAG
GTCAATCAACTTCTGTACTGGGCTCTGACCACAATCGGTTTTCAGACCACAATGTTAGGAGGGTATTTTT
ATATCCCTCCAGTTAACAAATACAGCACTGGCATGGTTCACCTTCTCCTGCAGGTGACCATTGACGGCAG
GAATTACATTGTCGATGCTGGGTCTGGAAGCTCCTCCCAGATGTGGCAGCCTCTAGAATTAATTTCTGGG
AAGGATCAGCCTCAGGTGCCTTGCATTTTCTGCTTGACAGAAGAGAGAGGAATCTGGTACCTGGACCAAA
TCAGGAGAGAGCAGTATATTACAAACAAAGAATTTCTTAATTCTCATCTCCTGCCAAAGAAGAAACACCA
AAAAATATACTTATTTACGCTTGAACCTCAAACAATTGAAGATTTTGAGTCTATGAATACATACCTGCAG
ACGTCTCCAACATCTTCATTTATAACCACATCATTTTGTTCCTTGCAGACCCCAGAAGGGGTTTACTGTT
TGGTGGGCTTCATCCTCACCTATAGAAAATTCAATTATAAAGACAATACAGATCTGGTCGAGTTTAAAAC
TCTCACTGAGGAAGAGGTTGAAGAAGTGCTGAAAAATATATTTAAGATTTCCTTGGGGAGAAATCTCGTG
CCCAAACCTGGTGATGGATCCCTTACTATT

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA



View online »

**Protein Sequence:**

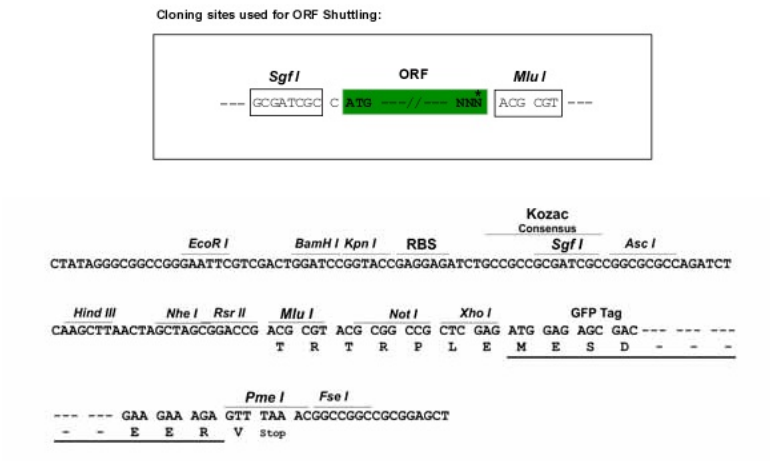
>RG209360 representing NM_000015
Red=Cloning site Green=Tags(s)

MDIEAYFERIGYKNSRNKLDLETLTDILEHQIRAVPFENLNMHCGQAMELGLEAIFDHIVRRNRGGWCLQ
VNQLLYWALTTIGFQTTMLGGYFYIPPVNKYSTGMVHLLLQVTIDGRNYIVDAGSGSSSQMWQPLELISG
KDQPQVPCIFCLTEERGIWYLDQIRREQYITNKEFLNSHLLPKKKHQKIYLFTLEPQTIEDFESMNTYLQ
TSPTSSFITTSFCSLQTPEGVYCLVGFILTYRKFNYKDNTDLVEFKTLTEEEVEEVLKNIFKISLGRNLV
PKPGDGSLTI

TRTRPLE – GFP Tag – V

**Restriction Sites:** SgfI-MluI

**Cloning Scheme:**




**ACCN:** NM_000015

**ORF Size:** 870 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_000015.2, NP_000006.2

**RefSeq Size:** 1317 bp

**RefSeq ORF:** 873 bp

**Locus ID:** 10

**UniProt ID:** P11245

**Cytogenetics:** 8p22

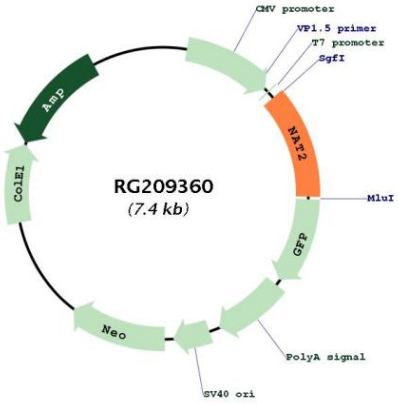
**Domains:** Acetyltransf2

**Protein Families:** Transmembrane

**Protein Pathways:** Caffeine metabolism, Drug metabolism - other enzymes, Metabolic pathways

**Gene Summary:** This gene encodes an enzyme that functions to both activate and deactivate arylamine and hydrazine drugs and carcinogens. Polymorphisms in this gene are responsible for the N-acetylation polymorphism in which human populations segregate into rapid, intermediate, and slow acetylator phenotypes. Polymorphisms in this gene are also associated with higher incidences of cancer and drug toxicity. A second polymorphic arylamine N-acetyltransferase gene (NAT1), is located near this gene (NAT2). [provided by RefSeq, Sep 2019]

## Product images:




Circular map for RG209360