

## Product datasheet for SC327444

## NAT1 (NM 001160171) Human Untagged Clone

**Product data:** 

**Product Type: Expression Plasmids** 

**Product Name:** NAT1 (NM\_001160171) Human Untagged Clone

Tag: Tag Free NAT1

Synonyms: AAC1; MNAT; NAT-1; NATI

**Mammalian Cell** None

Selection:

Symbol:

Vector: pCMV6-XL5

E. coli Selection: Ampicillin (100 ug/mL)

**Fully Sequenced ORF:** >NCBI ORF sequence for NM\_001160171, the custom clone sequence may differ by one or

more nucleotides

ATGGACATTGAAGCATATCTTGAAAGAATTGGCTATAAGAAGTCTAGGAACAAATTGGAC TTGGAAACATTAACTGACATTCTTCAACACCAGATCCGAGCTGTTCCCTTTGAGAACCTT AACATCCATTGTGGGGATGCCATGGACTTAGGCTTAGAGGCCATTTTTGATCAAGTTGTG AGAAGAAATCGGGGTGGATGGTGTCTCCAGGTCAATCATCTTCTGTACTGGGCTCTGACC ACTATTGGTTTTGAGACCACGATGTTGGGAGGGTATGTTTACAGCACTCCAGCCAAAAAA TACAGCACTGGCATGATTCACCTTCTCCTGCAGGTGACCATTGATGGCAGGAACTACATT GTCGATGCTGGGTTTGGACGCTCATACCAGATGTGGCAGCCTCTGGAGTTAATTTCTGGG AAGGATCAGCCTCAGGTGCCTTGTGTCTTCCGTTTGACGGAAGAAATGGATTCTGGTAT CTAGACCAAATCAGAAGGGAACAGTACATTCCAAATGAAGAATTTCTTCATTCTGATCTC CTAGAAGACAGCAAATACCGAAAAATCTACTCCTTTACTCTTAAGCCTCGAACAATTGAA GATTTTGAGTCTATGAATACATACCTGCAGACATCTCCATCATCTGTGTTTACTAGTAAA TCATTTTGTTCCTTGCAGACCCCAGATGGGGTTCACTGTTTGGTGGGCTTCACCCTCACC GAAGAAATAGAAAAAGTGCTGAAAAATATATTTAATATTTCCTTGCAGAGAAAGCTTGTG

CCCAAACATGGTGATAGATTTTTTACTATT

**Restriction Sites:** Please inquire ACCN: NM 001160171

OTI Disclaimer: Our molecular clone sequence data has been matched to the reference identifier above as a

> point of reference. Note that the complete sequence of our molecular clones may differ from the sequence published for this corresponding reference, e.g., by representing an alternative

RNA splicing form or single nucleotide polymorphism (SNP).



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## NAT1 (NM\_001160171) Human Untagged Clone - SC327444

OTI Annotation: This TrueClone is provided through our Custom Cloning Process that includes sub-cloning

into OriGene's pCMV6 vector and full sequencing to provide a non-variant match to the expected reference without frameshifts, and is delivered as lyophilized plasmid DNA.

**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: <u>NM 001160171.1</u>, <u>NP 001153643.1</u>

RefSeq Size:2199 bpRefSeq ORF:873 bp

Locus ID: 9

UniProt ID: P18440

Cytogenetics: 8p22

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

**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]

Transcript Variant: This variant (2, also known as Type IID) lacks an alternate exon in the 5' UTR, compared to variant 1. This variant is transcribed from a promoter known as P1, promoter 2, or NATb promoter. Variants 1-6 and 9 all encode the same isoform (a).