

## **Product datasheet for RC231833**

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# NUDT2 (NM 001244390) Human Tagged ORF Clone

### **Product data:**

**Product Type:** Expression Plasmids

Product Name: NUDT2 (NM\_001244390) Human Tagged ORF Clone

Tag:Myc-DDKSymbol:NUDT2Synonyms:APAH1

Mammalian Cell Neo

Selection:

Neomycin

Vector:pCMV6-Entry (PS100001)E. coli Selection:Kanamycin (25 ug/mL)ORF Nucleotide>RC231833 ORF sequence

Sequence: Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC

GCCGCGATCGCC

ATGGCCTTGAGAGCATGTGGCTTGATCATCTTCCGAAGATGCCTCATTCCCAAAGTGGACAACAATGCAA
TTGAGTTTTTACTGCTGCAGGCATCAGATGGCATTCATCACTGGACTCCTCCCAAAGGCCATGTGGAACC
AGGAGAGGATGACTTGGAAACAGCCCTGAGGGAGACCCAAGAGGAAGCAGGCATAGAAGCAGGCCAGCTG
ACCATTATTGAGGGGTTCAAAAAGGGAACTCAATTATGTGGCCAGGAACAAGCCTAAAACAGTCATTTACT
GGCTGGCGGAGGTGAAGGACTATGACGTGGAGATCCGCCTCTCCCATGAGCACCAAGCCTACCGCTGGCT
GGGGCTGGAGGAGGAGCCTGCCAGTTGGCTCAGTTCAAGGAGATGAAGGCAGCGCTCCAAGAAGGACACCAG

TTTCTTTGCTCCATAGAGGCC

**ACGCGT**ACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGGATCTGGCAGCAAATGATATCCTGGATT

ACAAGGATGACGACGATAAGGTTTAA

**Protein Sequence:** >RC231833 protein sequence

Red=Cloning site Green=Tags(s)

MALRACGLIIFRRCLIPKVDNNAIEFLLLQASDGIHHWTPPKGHVEPGEDDLETALRETQEEAGIEAGQL TIIEGFKRELNYVARNKPKTVIYWLAEVKDYDVEIRLSHEHQAYRWLGLEEACQLAQFKEMKAALQEGHQ

FLCSIEA

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

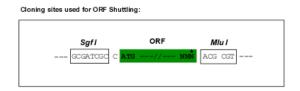
**Chromatograms:** https://cdn.origene.com/chromatograms/mk6048 g10.zip

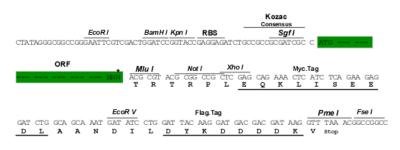




**Restriction Sites:** Sgfl-Mlul

**Cloning Scheme:** 





<sup>\*</sup> The last codon before the Stop codon of the ORF

**ACCN:** NM 001244390

ORF Size: 441 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:** <u>NM 001244390.1</u>, <u>NP 001231319.1</u>

RefSeq Size: 843 bp RefSeq ORF: 444 bp Locus ID: 318



 UniProt ID:
 P50583

 Cytogenetics:
 9p13.3

**Protein Pathways:** Purine metabolism, Pyrimidine metabolism

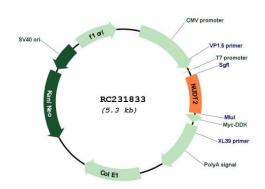
**MW:** 16.8 kDa

**Gene Summary:** This gene encodes a member of the MutT family of nucleotide pyrophosphatases, a subset of

the larger NUDIX hydrolase family. The gene product possesses a modification of the MutT sequence motif found in certain nucleotide pyrophosphatases. The enzyme asymmetrically hydrolyzes Ap4A to yield AMP and ATP and is responsible for maintaining the intracellular level of the dinucleotide Ap4A, the function of which has yet to be established. This gene may be a candidate tumor suppressor gene. Alternative splicing has been observed at this locus and four transcript variants, all encoding the same protein, have been identified. [provided by

RefSeq, Sep 2011]

### **Product images:**



Circular map for RC231833