

## Product datasheet for MR201165

### Nudt1 (NM\_008637) Mouse Tagged ORF Clone

#### Product data:

**Product Type:** Expression Plasmids  
**Product Name:** Nudt1 (NM\_008637) Mouse Tagged ORF Clone  
**Tag:** Myc-DDK  
**Symbol:** Nudt1  
**Synonyms:** Mth1  
**Mammalian Cell Selection:** Neomycin  
**Vector:** pCMV6-Entry (PS100001)  
**E. coli Selection:** Kanamycin (25 ug/mL)  
**ORF Nucleotide Sequence:** >MR201165 ORF sequence  
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCC**CGATCGCC**

ATGAGCACCTCCAGGCTTTATACCCTTGTGCTAGTGCTACAGCCTCAGCGAGTTCTCCTGGGCATGAAGA  
 AGAGGGGCTTTGGTGCTGGCCGCTGGAATGGCTTCGGGGCAAGGTGCAGGAAGGAGAGACCATTGAGGA  
 TGGGGCTAAGAGAGAGCTGCTGGAAGAAAGTGGTCTGAGCGTGGATACACTGCACAAGGTAGGCCACATC  
 TCGTTTGAATTTGTGGCTCCCCTGAGCTGATGGACGTGCATATCTTCTCGGCTGACCATGTGCACGGGA  
 CGCCACAGAGAGTGAAGAAATGCGCCCTCAGTGGTTCCAACCTGGACCAGATCCCCTTTGCCGACATGTG  
 GCCGGATGACAGCTACTGGTCCCACTCCTGCTTCAGAAGAAGAAGTTCTGTGGGCACTCAAGTCCAG  
 GATCAGGACACGATCCTCAGTACTCGCTGCGAGAGGTGGACTCATT

**ACGCGT**ACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT  
 ACAAGGATGACGACGATAAGGTTTAA

**Protein Sequence:** >MR201165 protein sequence  
 Red=Cloning site Green=Tags(s)

MSTRLYTLVLLVLPQQRVLLGMKKRFGFAGRWNGFGGKVQEGETIEDGAKRELLEESGLSVDTLHKVGH  
 SFEFVGSPELMDVHIFSAHDVHGTPTSEEMRPQWFQLDQIPFADMWPDSSYWFPLLLQKKKFCGHFKFQ  
 DQDTILSYSLREVDSF

**TR**TRPLEQKLISEEDLAANDILDYKDDDDKV

**Restriction Sites:** Sgfl-MluI



[View online »](#)

**Cloning Scheme:**


**ACCN:** NM\_008637

**ORF Size:** 471 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\\_008637.1](#), [NP\\_032663.1](#)

**RefSeq Size:** 939 bp

**RefSeq ORF:** 471 bp

**Locus ID:** 17766

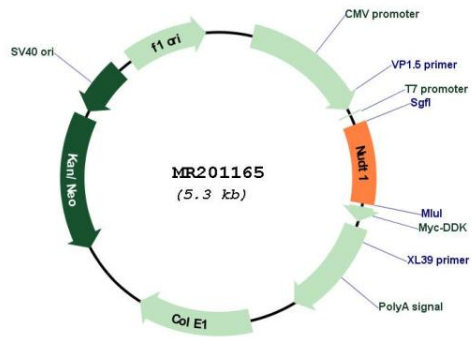
**UniProt ID:** [P53368](#)

**Cytogenetics:** 5 G2

**MW:** 17.9 kDa

**Gene Summary:** Antimutagenic (PubMed:11572992). Plays a redundant role in sanitizing oxidized nucleotide pools, such as 8-oxo-dGTP pools (PubMed:29281266). Acts as a sanitizing enzyme for oxidized nucleotide pools, thus suppressing cell dysfunction and death induced by oxidative stress. Hydrolyzes 8-oxo-dGTP, 8-oxo-dATP and 2-OH-dATP, thus preventing misincorporation of oxidized purine nucleoside triphosphates into DNA and subsequently preventing A:T to C:G and G:C to T:A transversions. Able to hydrolyze also the corresponding ribonucleotides, 2-OH-ATP, 8-oxo-GTP and 8-oxo-ATP (By similarity). Does not play a role in U8 snoRNA decapping activity (PubMed:21070968). Binds U8 snoRNA (PubMed:21070968).[UniProtKB/Swiss-Prot Function]

**Product images:**



Circular map for MR201165