

Product datasheet for **MG201165**

Nudt1 (NM_008637) Mouse Tagged ORF Clone

Product data:

Product Type: Expression Plasmids
Product Name: Nudt1 (NM_008637) Mouse Tagged ORF Clone
Tag: TurboGFP
Symbol: Nudt1
Synonyms: Mth1
Mammalian Cell Selection: Neomycin
Vector: pCMV6-AC-GFP (PS100010)
E. coli Selection: Ampicillin (100 ug/mL)
ORF Nucleotide Sequence: >MG201165 representing NM_008637
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGAGCACCTCCAGGCTTTATACCCTTGTGCTAGTGCTACAGCCTCAGCGAGTTCTCTGGGCATGAAGA
AGAGGGGCTTTGGTGCTGGCCGCTGGAATGGCTTCGGGGCAAGGTGCAGGAAGGAGAGACCATTGAGGA
TGGGGCTAAGAGAGAGCTGCTGGAAGAAAGTGGTCTGAGCGTGGATACACTGCACAAGGTAGGCCACATC
TCGTTTGAATTTGTGGGCTCCCCTGAGCTGATGGACGTGCATATCTTCTCGGCTGACCATGTGCACGGGA
CGCCACAGAGAGTGAAGAAATGCGCCCTCAGTGGTTCCAACCTGGACCAGATCCCCTTTGCCGACATGTG
GCCGGATGACAGCTACTGGTCCCACTCCTGCTTCAAGAAGAAGTTCTGTGGGCACTCAAGTCCAG
GATCAGGACACGATCCTCAGTACTCGCTGCGAGAGGTGGACTCATT

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

Protein Sequence: >MG201165 representing NM_008637
Red=Cloning site Green=Tags(s)

MSTSRLYTLVVLVLPQRVLLGMKKRFGAGRWNGFGGKVVQEGETIEDGAKRELLEESGLSVDTLHKVGH
SFEVFGSPELMDVHIFSADHVHGTPTSEEMRPQWFQLDQIPFADMWPDDSYWFPLLLQKKKFCGHFKFQ
DQDTILSYSLREVDSF

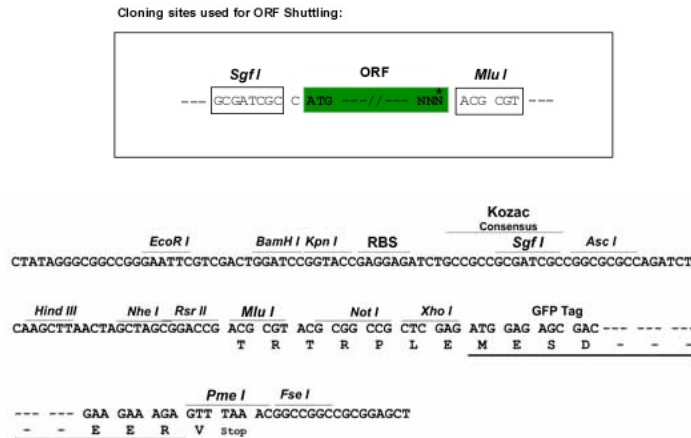
TRTRPLE - GFP Tag - V

Restriction Sites: Sgfl-MluI

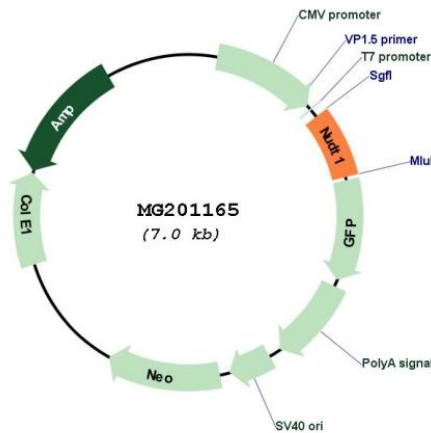


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Cloning Scheme:



Plasmid Map:



ACCN: NM_008637

ORF Size: 468 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:	<ol style="list-style-type: none">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
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]