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 MR201427

Nudt15 (NM_172527) Mouse Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Nudt15 (NM_172527) Mouse Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Nudt15
Synonyms:	6530403O17; A730068G11Rik; MTH2
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)

ORF Nucleotide Sequence:

>MR201427 ORF sequence
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCCGCGATCGCC

ATGGCCGCTAACGCAGAGCCGAGGCGGCGGCCAGGAGTTGGGGTCGGCGTGGTGGTGCTGAGCTGCGAGC
ATCCTCGCTGCGTCCTTCTGGGGAAAAGGAAAGGATCGTTTGGAGCCGGCAGTTTCCAGCTTCCTGGGGG
CCATTTGGAATTCGGTGAGACCTGGGAAGAATGCGCTCAGAGAGAAACCTGGGAAGAAGCTGGGCTTCAC
CTGAAAAATGTGTGCTTTGCCTCCGTGGTAAATTCTTTTGTTGAGAAGGAGAATTACCATTATGTTACCA
TATTAATGAAAGGAGAGGTGGATATGACTCATGATTCGGAGCCGAGGAATATGGAGCCTGAAAAGAATGA
AAGTTGGGAGTGGGTTCCATGGGAAGAATTCCCTCCCTTAGACCAGCTTTTCTGGGCTCTCCGCTGTCTA
AAAGAGCAAGGTTATGACCCATTTAAAGAGGACCTGAACCACCTGGAAGGGTACCGAGGAGAGCACCTTG
AAAGGACCACGAAGACTCCT

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence:

>MR201427 protein sequence
Red=Cloning site Green=Tags(s)

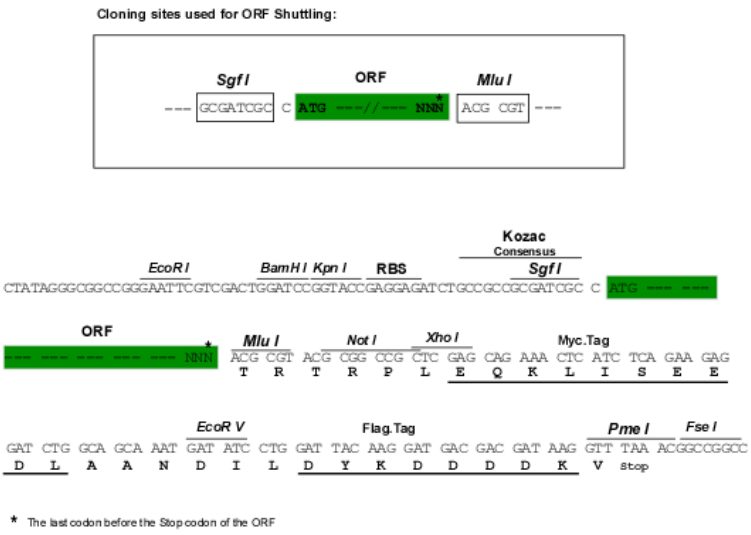
MAANAEPRRRPGVGVGVVVLSCEHPRCVLLGKRKGSFGAGSFQLPGGHLEFGETWEECAQRETWEEAGLH
LKNVCFASVVNSFVEKENYHYVTILMKGEVDMTHDSEPRNMEPEKNESWEWVPWEEFPPLDQLFWALRCL
KEQGYDPFKEDLNHLEGYRGEHLERTTKTP

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Restriction Sites: SgfI-MluI

View online »

Cloning Scheme:



ACCN: NM_172527

ORF Size: 510 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.

Note: Plasmids are not sterile. For experiments where strict sterility is required, filtration with 0.22um filter is required.

RefSeq: NM_172527.3

RefSeq Size: 2592 bp

RefSeq ORF: 513 bp

Locus ID: 214254

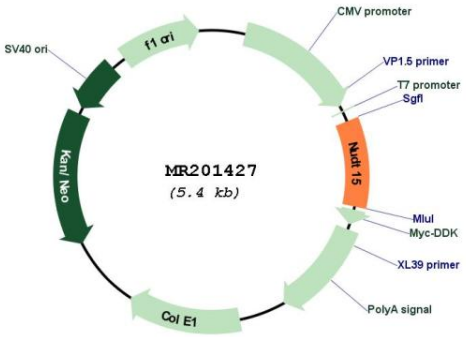
UniProt ID: Q8BG93

Cytogenetics: 14 D3

MW: 19.6 kDa

Gene Summary: May catalyze the hydrolysis of nucleoside triphosphates including dGTP, dTTP, dCTP, their oxidized forms like 8-oxo-dGTP and the prodrug thiopurine derivatives 6-thio-dGTP and 6-thio-GTP (PubMed:12767940). Could also catalyze the hydrolysis of some nucleoside diphosphate derivatives (By similarity). Hydrolyzes oxidized nucleosides triphosphates like 8-oxo-dGTP in vitro, but the specificity and efficiency towards these substrates are low. Therefore, the potential in vivo sanitizing role of this enzyme, that would consist in removing oxidatively damaged forms of nucleosides to prevent their incorporation into DNA, is unclear (PubMed:12767940). Through the hydrolysis of thioguanosine triphosphates may participate in the catabolism of thiopurine drugs (By similarity). May also have a role in DNA synthesis and cell cycle progression by stabilizing PCNA (By similarity).[UniProtKB/Swiss-Prot Function]

Product images:



Circular map for MR201427