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Product datasheet for RC210477

NUDT15 (NM_018283) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	NUDT15 (NM_018283) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	NUDT15
Synonyms:	MTH2; NUDT15D
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)

ORF Nucleotide Sequence:

>RC210477 representing NM_018283
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCCGCGATCGCC

ATGACGGCCAGCGCACAGCCGCGCGGGCGGCGGCCAGGAGTCGGAGTCGGAGTCGTGGTGACCAGCTGCA
AGCATCCGCGTTGCGTCCTCCTGGGGAAGAGGAAAGGCTCGGTTGGAGCTGGCAGTTTCCAACTCCCTGG
AGGTCATCTGGAGTTCGGTGAAACCTGGGAAGAATGTGCTCAAAGGGAAACCTGGGAAGAAGCAGCTCTT
CACCTGAAAAATGTTCACTTTGCCTCAGTTGTGAATTCTTTCATTGAGAAGGAGAATTACCATTATGTTA
CTATATTAATGAAAGGAGAAGTGGATGTGACTCATGATTCAGAACCAAAGAATGTAGAGCCTGAAAAAAA
TGAAAGTTGGGAGTGGGTTCCTTGGGAAGAACTGCCTCCCCTGGACCAGCTTTTCTGGGGACTGCGTTGT
TTAAAAGAACAAGGCTATGATCCATTTAAAGAAGATCTGAACCATCTGGTGGGATACAAAGGAAATCATC
TC

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence:

>RC210477 representing NM_018283
Red=Cloning site Green=Tags(s)

MTASAQPRGRRPGVGVGVVVTSCKHPRCVLLGKRKGSVGAGSFQLPGGHLEFGETWEECAQRETWEEAAL
HLKNVHFASVVNSFIEKENYHYVTILMKGEVDVTHDSEPKNVEPEKNESWEWVPWEELPPLDQLFWGLRC
LKEQGYDPFKEDLNHLVGYKGNHL

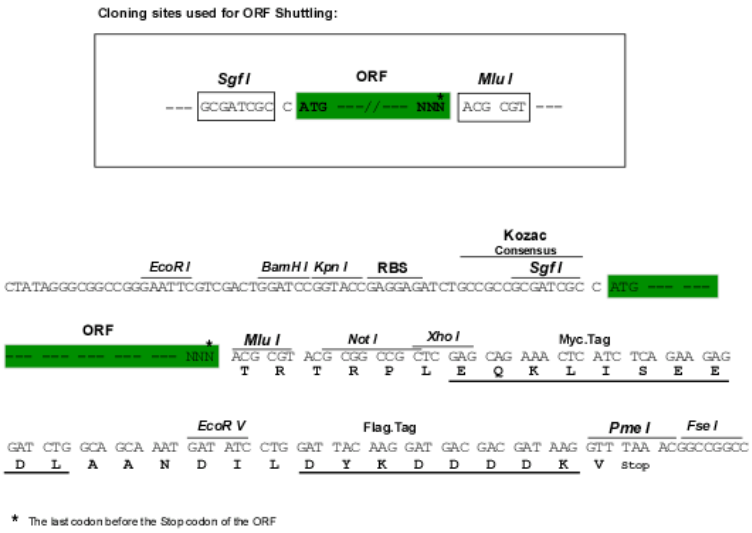
TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mg2605_g10.zip

View online »

Restriction Sites: SgfI-MluI

Cloning Scheme:



* The last codon before the Stop codon of the ORF

ACCN: NM_018283

ORF Size: 492 bp

OTI Disclaimer: Due to the inherent nature of this plasmid, standard methods to replicate additional amounts of DNA in E. coli are highly likely to result in mutations and/or rearrangements. Therefore, OriGene does not guarantee the capability to replicate this plasmid DNA. Additional amounts of DNA can be purchased from OriGene with batch-specific, full-sequence verification at a reduced cost. Please contact our customer care team at custsupport@origene.com or by calling 301.340.3188 option 3 for pricing and delivery.

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.

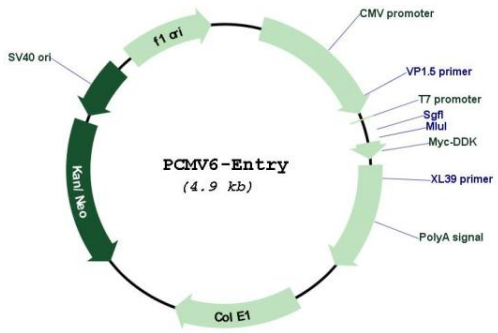
Components: The ORF clone is ion-exchange column purified and shipped in a 2D barcoded Matrix tube containing 10ug of transfection-ready, dried plasmid DNA (reconstitute with 100 ul of water).

Reconstitution Method:

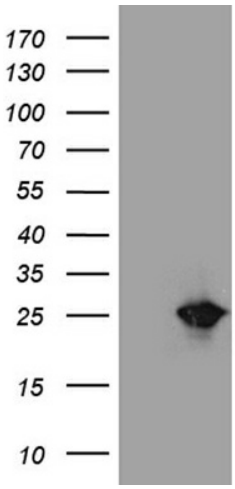
1. Centrifuge at 5,000xg for 5min.
2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.
3. Close the tube and incubate for 10 minutes at room temperature.
4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom.
5. Store 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_018283.4
RefSeq Size:	2022 bp
RefSeq ORF:	495 bp
Locus ID:	55270
UniProt ID:	Q9NV35
Cytogenetics:	13q14.2
Domains:	NUDIX
MW:	18.4 kDa
Gene Summary:	This gene encodes an enzyme that belongs to the Nudix hydrolase superfamily. Members of this superfamily catalyze the hydrolysis of nucleoside diphosphates, including substrates like 8-oxo-dGTP, which are a result of oxidative damage, and can induce base mispairing during DNA replication, causing transversions. The encoded enzyme is a negative regulator of thiopurine activation and toxicity. Mutations in this gene result in poor metabolism of thiopurines, and are associated with thiopurine-induced early leukopenia. Multiple pseudogenes of this gene have been identified. [provided by RefSeq, Apr 2016]

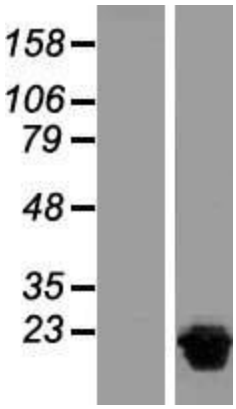
Product images:



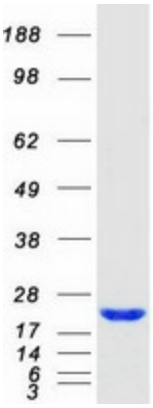
Circular map for RC210477



HEK293T cells were transfected with the pCMV6-ENTRY control (Cat# [PS100001], Left lane) or pCMV6-ENTRY NUDT15 (Cat# RC210477, Right lane) cDNA for 48 hrs and lysed. Equivalent amounts of cell lysates (5 ug per lane) were separated by SDS-PAGE and immunoblotted with anti-NUDT15 (Cat# [TA811515])(1:2000). Positive lysates [LY402670] (100ug) and [LC402670] (20ug) can be purchased separately from OriGene.



Western blot validation of overexpression lysate (Cat# [LY402670]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from un-transfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC210477 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified NUDT15 protein (Cat# [TP310477]). The protein was produced from HEK293T cells transfected with NUDT15 cDNA clone (Cat# RC210477) using MegaTran 2.0 (Cat# [TT210002]).