

Product datasheet for **RC200204**

NUDT5 (NM_014142) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	NUDT5 (NM_014142) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	NUDT5
Synonyms:	hNUDT5; YSA1; YSA1H; YSAH1
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>RC200204 ORF sequence Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGGAGAGCCAAGAACCAACGGAATCTTCTCAGAATGGCAAACAGTATATCATTTCAGAGGAGTTAATTT
CAGAAGGAAAATGGGTCAAGCTTGAAAAACAACGTACATGGATCCTACTGGTAAACTAGAACTTGGGA
ATCAGTAAACGTACAACCAGGAAAGAGCAGACTGCGGATGGTGTGCGGGTCATCCCGTCTGCAGAGA
ACACTTCACTATGAGTGTATCGTTCTGGTAAACAGTTCGACCACCAATGGGGGCTACTGCATAGAGT
TCCCTGCAGGTCTCATAGATGATGGTGAACCCAGAAGCAGCTGCTCTCCGGGAGCTTGAAGAAGAAAC
TGGCTACAAAGGGGACATTGCCGAATGTTCTCCAGCGGTCTGTATGGACCCAGGCTTGCAAACGTACT
ATACACATCGTGACAGTACCATTAACGGAGATGATGCCGAAAACGCAAGCCGAAGCCAAAGCCAGGGG
ATGGAGAGTTTGTGGAAGTCATTTCTTTACCCAAGAATGACCTGCTGCAGAGACTTGATGCTCTGGTAGC
TGAAGAACATCTCACAGTGGACGCCAGGCTCTATTCTACGCTCTAGCACTGAAACATGCAAATGCAAAG
CCATTTGAAGTGCCCTTCTTGAATTT

ACGCGTACGCGGGCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA



[View online »](#)

Protein Sequence: >RC200204 protein sequence
Red=Cloning site Green=Tags(s)

MESQEPTESSQNGKQYIISEELISEGKWKLEKTTYMDPTGKTRTWESVKRTRRKEQTADGVAVIPVLQR
 TLHYECIVLVKQFRPPMGGYCIFFPAGLIDGGETPEAAALRELEEETGYKGDIAECSPAVCMPLSNCT
 IHIVTVTINGDDAENARPKPKPGDGEFVEVISLPKNDLLQRLDALVAEEHLTVDARVYSYALALKHANAK
 PFEVPLKFK

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mk6081_a06.zip

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_014142

ORF Size: 657 bp

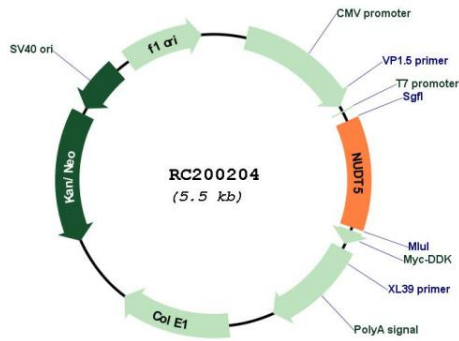
OTI Disclaimer: The molecular sequence of this clone aligns with the gene accession number as a point of reference only. However, individual transcript sequences of the same gene can differ through naturally occurring variations (e.g. polymorphisms), each with its own valid existence. This clone is substantially 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.

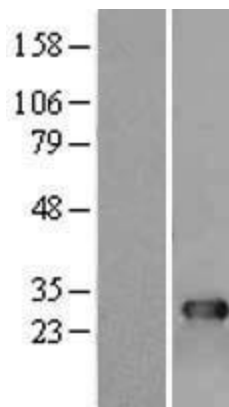
Components: The ORF clone is ion-exchange column purified and shipped in a 2D barcoded Matrix tube containing 10ug of transfection-ready, dried plasmid DNA (reconstitute with 100 ul of water).

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_014142.4
RefSeq Size:	1224 bp
RefSeq ORF:	660 bp
Locus ID:	11164
UniProt ID:	Q9UUK9
Cytogenetics:	10p14
Domains:	NUDIX
Protein Pathways:	Purine metabolism
MW:	24.3 kDa
Gene Summary:	<p>This gene belongs to the Nudix (nucleoside diphosphate linked moiety X) hydrolase superfamily. The encoded enzyme catalyzes the hydrolysis of modified nucleoside diphosphates, including ADP-ribose (ADPR) and 8-oxoGua-containing 8-oxo-dADP and 8-oxo-dGDP. Protein-bound ADP ribose can be hazardous to the cell because it can modify some amino acid residues, resulting in the inhibition of ATP-activated potassium channels. 8-oxoGua is an oxidized form of guanine that can potentially alter genetic information by pairing with adenine and cytosine in RNA. Presence of 8-oxoGua in RNA results in formation of abnormal proteins due to translational errors. [provided by RefSeq, Aug 2013]</p>

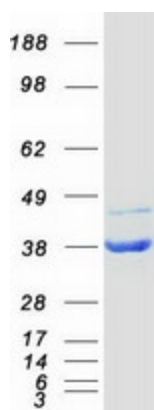
Product images:



Circular map for RC200204



Western blot validation of overexpression lysate (Cat# [LY415472]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC200204 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified NUDT5 protein (Cat# [TP300204]). The protein was produced from HEK293T cells transfected with NUDT5 cDNA clone (Cat# RC200204) using MegaTran 2.0 (Cat# [TT210002]).