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Product datasheet for RC204100

NUDT4 (NM_019094) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	NUDT4 (NM_019094) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	NUDT4
Synonyms:	DIPP-2B; DIPP2; DIPP2alpha; DIPP2beta; HDCMB47P; NUDT4B
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)

ORF Nucleotide Sequence:

>RC204100 ORF sequence
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCCGCGATCGCC

ATGATGAAGTTCAAGCCCAACCAGACGCGGACCTACGACCGCGAGGGCTTCAAGAAGCGGGCGGCGTGCC
TGTGCTTCCGGAGCGAGCAGGAGGACGAGGTGCTGCTGGTGAGTAGCAGCCGGTACCCAGACCAGTGGAT
TGTCCCAGGAGGAGGAATGGAACCCGAGGAGGAACCTGGCGGTGCTGCCGTGAGGGAAGTTTATGAGGAG
GCTGGAGTCAAAGGAAAACTAGGCAGACTTCTGGGCATATTTGAGCAGAACCAAGACCGAAAGCACAGAA
CATATGTTTATGTTCTAACAGTCACTGAAATATTAGAAGATTGGGAAGATTCTGTTAATATTGGAAGGAA
GAGAGAGTGGTTCAAAGTAGAAGATGCTATCAAAGTTCTCCAGTGTCATAAACCTGTACATGCAGAGTAT
CTGGAAAAGCTAAAGCTGGGTTGTTCCCCAGCCAATGGAAATTCTACAGTCCCTTCCCTTCCGGATAATA
ATGCCTTGTTTGTAACCGCTGCACAGACCTCTGGGTTGCCATCTAGTGTAAGA

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence:

>RC204100 protein sequence
Red=Cloning site Green=Tags(s)

MMKFKPNQTRTYDREGFKKRAACLCFRSEQEDEVLLVSSSRYPDQWIVPGGGMEPEEEPGGAAVREVYEE
AGVKGKLGRLLGIFEQNQDRKHRTYVYVLTVTEILEDWEDSVNIGRKREWFKVEDAIKVLQCHKPVHAEY
LEKLKLGCSPANGNSTVPSLPDNNALFVTAAQTSGLPSSVR

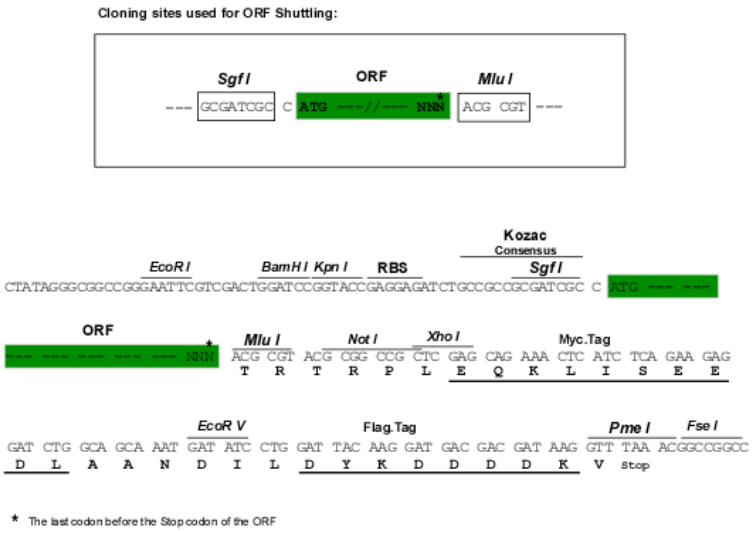
TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mk6430_d12.zip

View online »

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_019094

ORF Size: 543 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.

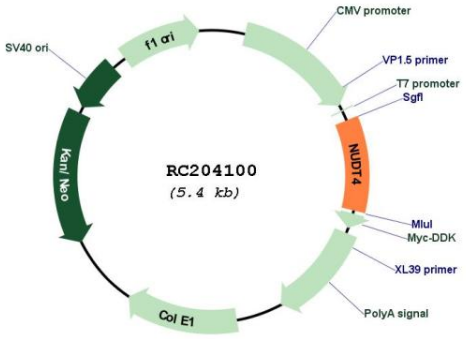
RefSeq: NM_019094.2

RefSeq Size: 4812 bp

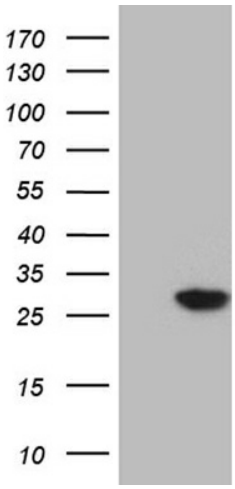
RefSeq ORF: 543 bp

Locus ID:	11163
UniProt ID:	Q9NZJ9
Cytogenetics:	12q22
Domains:	NUDIX
Protein Families:	Druggable Genome
MW:	20.4 kDa
Gene Summary:	The protein encoded by this gene regulates the turnover of diphosphoinositol polyphosphates. The turnover of these high-energy diphosphoinositol polyphosphates represents a molecular switching activity with important regulatory consequences. Molecular switching by diphosphoinositol polyphosphates may contribute to regulating intracellular trafficking. Several alternatively spliced transcript variants have been described, but the full-length nature of some variants has not been determined. Isoforms DIPP2alpha and DIPP2beta are distinguishable from each other solely by DIPP2beta possessing one additional amino acid due to intron boundary skidding in alternate splicing. [provided by RefSeq, Jul 2008]

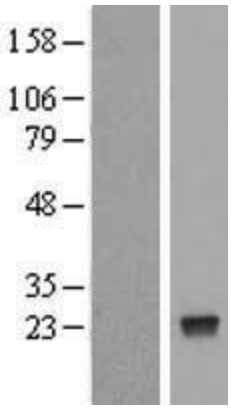
Product images:



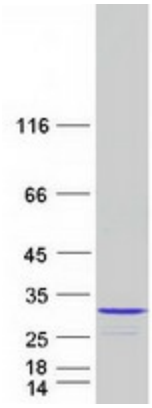
Circular map for RC204100



HEK293T cells were transfected with the pCMV6-ENTRY control (Cat# [PS100001], Left lane) or pCMV6-ENTRY NUDT4 (Cat# RC204100, 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-NUDT4 (Cat# [TA809679])(1:2000). Positive lysates [LY412753] (100ug) and [LC412753] (20ug) can be purchased separately from OriGene.



Western blot validation of overexpression lysate (Cat# [LY412753]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from un-transfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC204100 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified NUDT4 protein (Cat# [TP304100]). The protein was produced from HEK293T cells transfected with NUDT4 cDNA clone (Cat# RC204100) using MegaTran 2.0 (Cat# [TT210002]).