

## Product datasheet for RC208717

### NUDT10 (NM\_153183) Human Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	NUDT10 (NM_153183) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	NUDT10
Synonyms:	APS2; DIP3-alpha; DIP3a
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>RC208717 ORF sequence Red=Cloning site Blue=ORF Green=Tags(s)

TTTGTAAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCCCGCATCGCC

ATGAAGTGCAAAACCAACGACACGGACCTACGACCCGAGGGGTTCAAGAAGCGGGCGGCGTGCCTGT  
 GCTTCCGAGCGAGCGGAGGACGAGGTCTGTTAGTGAGTAGCAGCCGGTACCGGACCGCTGGATCGT  
 GCCGGGCGGGGCATGGAGCCGAGGAGGAGCCGGCGGTGCGGCGGTCCGAGAGGTGTACGAAGAGGCG  
 GGAGTCAAGGGGAAGTTAGGCCGCTCTGGCGTCTTGAACAGAACAGGACCCGAGCACAGAACGT  
 ACGTGTATGTACTGACTGTCACGGAGCTGCTGGAGGATTGGGAAGATTTCGTTAGCATTGGGAGGAAGCG  
 AGAGTGGTTCAAAGTCGAAGATGCCATCAAGTTCTCCAGTGCCACAAGCCCGTGACGCCGAATATCTG  
 GAGAACTAAAGCTGGGCGGTTCCCAACCAATGGAACTCCATGGCCCCATCTCGCCAGATAGCGATC  
 CC

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT  
 ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence:	>RC208717 protein sequence Red=Cloning site Green=Tags(s)
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MKCKPNQTRTYDPEGFKKRAACLCFRSEREDEVLVSSSRYPDRWIVPGGMEPEEPPGGAHVREYEEA  
 GVKGLGRLLGVFEQNQDPEHRTYVYVLVTLELLEDWEDSVSIGRKREWFVEDAIKVLQCHKPVHAEYL  
 EKLKLGSPNTNGNSMAPSSPDSDP

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms:	<a href="https://cdn.origene.com/chromatograms/mk6361_h12.zip">https://cdn.origene.com/chromatograms/mk6361_h12.zip</a>
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Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM\_153183

ORF Size: 492 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\\_153183.3](#)

RefSeq Size: 2018 bp

RefSeq ORF: 495 bp

Locus ID: 170685

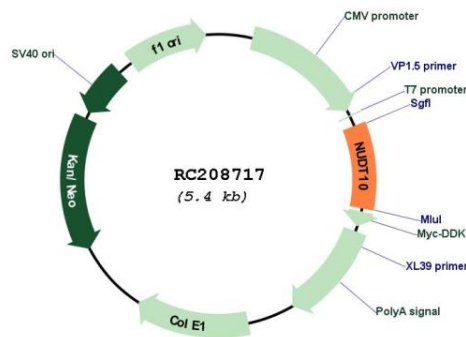
UniProt ID: [Q8NFP7](#)

Cytogenetics: Xp11.22

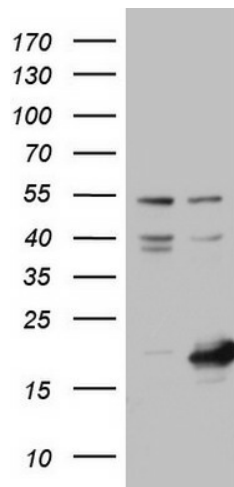
MW: 18.5 kDa

**Gene Summary:** This gene is a member of the nudix (nucleoside diphosphate linked moiety X)-type motif containing family. The encoded protein is a phosphohydrolase and may regulate 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 the regulation of intracellular trafficking. In some populations putative prostate cancer susceptibility alleles have been identified for this gene. Alternatively spliced transcript variants, which differ only in the 5' UTR, have been found for this gene. [provided by RefSeq, Feb 2015]

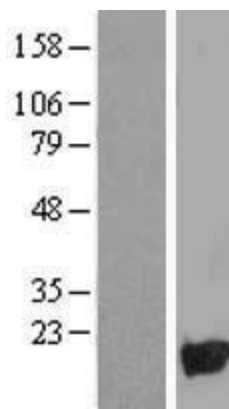
## Product images:



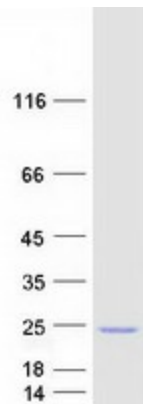
Circular map for RC208717



HEK293T cells were transfected with the pCMV6-ENTRY control (Cat# [PS100001], Left lane) or pCMV6-ENTRY NUDT10 (Cat# RC208717, 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-NUDT10 (Cat# [TA804324]). Positive lysates [LY407127] (100ug) and [LC407127] (20ug) can be purchased separately from OriGene.



Western blot validation of overexpression lysate (Cat# [LY407127]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC208717 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified NUDT10 protein (Cat# [TP308717]). The protein was produced from HEK293T cells transfected with NUDT10 cDNA clone (Cat# RC208717) using MegaTran 2.0 (Cat# [TT210002]).