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Product datasheet for RC218737

UROC1 (NM_144639) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	UROC1 (NM_144639) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	UROC1
Synonyms:	HMFN0320; UROCD
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)

View online »

ORF Nucleotide Sequence:

>RC218737 ORF sequence
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCCGCGATCGCC

ATGTCTAGCCTCCAGGCGCTGTGCTCTGGCCTGCCCCTGCGGCCCCTCCCAGAGAACCGGGGACGCCAGG
CTGGGGTGCCCCATGCCCCTGTCAGGACCCCCAGCCTCAGCCCTGTGGAGAAACAGCTGGCGCTGAGGAA
CGCCCTGCGCTACTTCCCCCCGGATGTCCAGGAGCTGCTGGCCCCAGAGTTTGCCCAGGAGCTGCAACTG
TACGGACACATCTACATGTACCGGTTTTGCCCCGACATTGAAATGAGGGCCTACCCGATTGAGCAGTACC
CCTGCCAGACGAAAGTGGCTGCCGCCATCATGCACATGATTATGAACAACCTGGATCCTGCCGTGGCCCA
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ACCATGTTCTACTTGTCGAAGATGACAGAGGAGCAGACTTTGGTCATGTACAGTGGGCACCCACTTGGCC
TCTTTCCCAGCAGCCGCAGTGCCCCACGGCTCGTCATCACCAATGGGATGGTCATTCCCAACTACTCCTC
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TGCTACATCGGTCCCCAGGGAATCGTTCATGGCACTGTGCTCACCGTGTTGAATGCTGCACGTCGGTACC
TGGGCATCGAGGACTTGGCTGGGAAGGTCTTTGTCACCTCTGGGCTCGGCGGAATGAGTGGGGCTCAGGC
CAAGGCCGCAGTCATCGTGGGGTGCATCGGTGTGATAGCAGAGGTGGATAAAGCAGCCCTTGAGAAACGC
CACAGGCAGGGCTGGCTGATGGAAGTGACTGACAGCTTGGACCGCTGCATCCAGAGGCTCAGGGAAGCAA
GGAAAAAAAAGGAGGTGCTCAGCCTTGGTTACCATGGCAACGTGGTGGCTCTTTGGGAGCGCCTGGTCCA
CGAATTGGACACGACGGGGGAGTGCTTGGTGGACCTGGGGTCAGATCAGACATCCTGCCACAACCCGTTC
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TGTTCAAGGACCTGGTCCAGGAAAGCCTGAGGAGGCAAGTCTCAGCCATCAACAGGTTGGCCGAGGAGAA
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CCACCTGGGTCGCCCTTCACAACGGAGGGGGCGTGGGCTGGGGTGAGGTGATCAACGGGGGATTCGGCCT
CGTGCTGGACGGTACCCCGGAGGCTGAGGGGAGAGCCAGGCTGATGCTCAGCTGGGATGTCTCCAATGGT
GTGGCCCGGCGCTGCTGGTCAGGGAACCAGAAGGCCTATGAGATCATCTGCCAGACCATGCAGGAGAACA
GCACCTTGGTGGTGACACTGCCTCACAAGGTGGAGGACGAGCGGGTGCTCCAGCAGGCCCTGCAGCTC

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence:

>RC218737 protein sequence
Red=Cloning site Green=Tags(s)

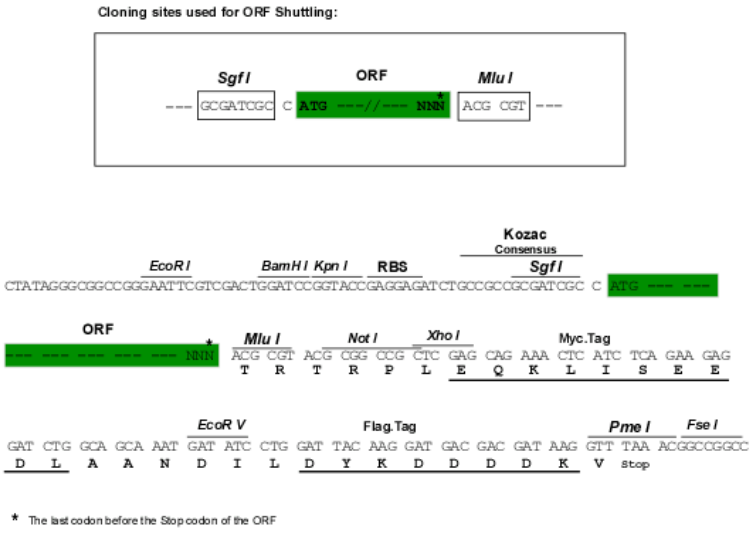
MSSLQALCSGLPLRPLPENRGRQAGVPHAPVRTPSLSPVEKQLALRNALRYFPPDVQELLAPEFAQELQL
YGHIYMYRFCPDIEMRAYPIEQYPCQTKVAAAIMHMIMNNLDPAVAQFPQELVTYGGNGQVFSNWAQFWL
TMFYLSKMTEEQTLVMYSGHPLGLFPSSRSAPRLVITNGMVIPNYSSRTEYEKLFALGVTMYGQMTAGSY
CYIGPQGIVHGTVLTVLNAARRYLGIEDLAGKVFVTSGLGGMSGAQAKAAVIVGCIGVIAEVDKAALEKR
HRQGWLMEVTDSLDRCIQRLREARKKKEVLSLGYHGNVVALWERLVHELDTTGECLVDLGSDQTSCHNPF
NGGYYPVQLSFTEAQSLMASNPAVFKDLVQESLRRQVSAINRLAEEKFFFWDYGNAFLLEAQRAGADVEK
KGAGRTEFRYPSYVQHIMGDIFSQGFGPFRWVCTSGDPQDLAVTDELATSVLEEAIADGVKVSVKLQYMD
NIRWIREAARHRLVVGSQARILYSDQKGRVAIAVAINQAIACRRIKAPVVLSRDHHDVSGTDSPFRETSN
IYDGSAFCADMAVQNFVGDACRGATWVALHNGGGVGWGEVINGGFGLVLDGTPEAEGRARLMLSWDVSNG
VARRCWSGNQKAYEIICQTMQENSTLVVTLPHKVEDERVLQQALQL

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mk6561_h01.zip

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_144639

ORF Size: 2028 bp

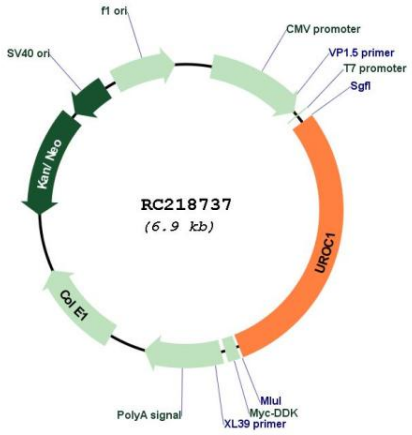
OTI Disclaimer: The molecular sequence of this clone aligns with the gene accession number as a point of reference only. However, individual transcript sequences of the same gene can differ through naturally occurring variations (e.g. polymorphisms), each with its own valid existence. This clone is substantially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

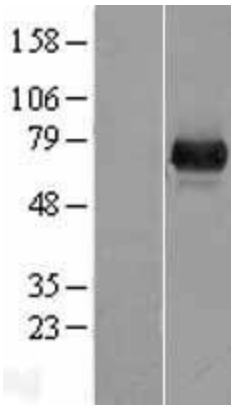
Components: The ORF clone is ion-exchange column purified and shipped in a 2D barcoded Matrix tube containing 10ug of transfection-ready, dried plasmid DNA (reconstitute with 100 ul of water).

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.
RefSeq:	NM_144639.3
RefSeq Size:	3280 bp
RefSeq ORF:	2031 bp
Locus ID:	131669
UniProt ID:	Q96N76
Cytogenetics:	3q21.3
Protein Pathways:	Histidine metabolism, Metabolic pathways
MW:	74.8 kDa
Gene Summary:	This gene encodes an enzyme involved in the second step of histidine catabolism, metabolizing urocanic acid to formiminoglutamic acid. Deficiency of this enzyme results in urocanic aciduria, and is an apparent cause of mental retardation. Multiple transcript variants encoding different isoforms have been found for this gene. [provided by RefSeq, Apr 2021]

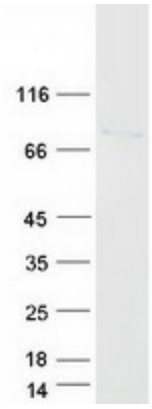
Product images:



Circular map for RC218737



Western blot validation of overexpression lysate (Cat# [LY408229]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from un-transfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC218737 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified UROC1 protein (Cat# [TP318737]). The protein was produced from HEK293T cells transfected with UROC1 cDNA clone (Cat# RC218737) using MegaTran 2.0 (Cat# [TT210002]).