OriGene Technologies, Inc.
9620 Medical Center Drive, Ste 200
Rockville, MD 20850, US
Phone: +1-888-267-4436
https://www.origene.com
techsupport@origene.com
EU: info-de@origene.com
CN: techsupport@origene.cn

Product datasheet for RC223787

Uromucoid (UMOD) (NM_003361) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Uromucoid (UMOD) (NM_003361) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Uromucoid
Synonyms:	ADMCKD2; ADTKD1; FJHN; HNFJ; HNFJ1; MCKD2; THGP; THP
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)

View online »

ORF Nucleotide Sequence:

>RC223787 representing NM_003361
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCCGCGATCGCC

ATGGGGCAGCCATCTCTGACTTGGATGCTGATGGTGGTGGTGGCCTCTTGGTTCATCACAACTGCAGCCA
CTGACACCTCAGAAGCAAGATGGTGCTCTGAATGTCACAGCAATGCCACCTGCACGGAGGATGAGGCCGT
TACGACGTGCACCTGTCAGGAGGGCTTCACCGGCGATGGCCTGACCTGCGTGGACCTGGATGAGTGCGCC
ATTCCTGGAGCTCACAACTGCTCCGCCAACAGCAGCTGCGTAAACACGCCAGGCTCCTTCTCCTGCGTCT
GCCCCGAAGGCTTCCGCCTGTCGCCCGGTCTCGGCTGCACAGACGTGGATGAGTGCGCTGAGCCTGGGCT
TAGCCACTGCCACGCCCTGGCCACATGTGTCAATGTGGTGGGCAGCTACTTGTGCGTATGCCCCGCGGGC
TACCGGGGGGATGGATGGCACTGTGAGTGCTCCCCGGGCTCCTGCGGGCCGGGGTTGGACTGCGTGCCCG
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CGAGTACGGGGAGGGCTACGCCTGCGACACGGACCTGCGCGGCTGGTACCGCTTCGTGGGCCAGGGCGGT
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CGCATCCGTCCAGCGACGAGGGCATCGTGAGCCGCAAGGCCTGCGCGCACTGGAGCGGCCACTGCTGCCT
GTGGGATGCGTCCGTCCAGGTGAAGGCCTGTGCCGGCGGCTACTACGTCTACAACCTGACAGCGCCCCCC
GAGTGTCACCTGGCGTACTGCACAGACCCCAGCTCCGTGGAGGGGACGTGTGAGGAGTGCAGTATAGACG
AGGACTGCAAATCGAATAATGGCAGATGGCACTGCCAGTGCAAACAGGACTTCAACATCACTGATATCTC
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CCACGGACCCCCTGAAGTACTTCATCATCCAGGACAGATGCCCACACACTAGAGACTCAACTATCCAAGT
GGTGGAGAATGGGGAGTCCTCCCAGGGCCGATTTTCCGTCCAGATGTTCCGGTTTGCTGGAAACTATGAC
CTAGTCTACCTGCACTGTGAAGTCTATCTCTGTGACACCATGAATGAAAAGTGCAAGCCTACCTGCTCTG
GGACCAGATTCCGAAGTGGGAGTGTCATAGATCAATCCCGTGTCCTGAACTTGGGTCCCATCACACGGAA
AGGTGTCCAGGCCACAGTCTCAAGGGCTTTTAGCAGCTTGGGGCTCCTGAAAGTCTGGCTGCCTCTGCTT
CTCTCGGCCACCTTGACCCTGACTTTTCAG

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence:

>RC223787 representing NM_003361
Red=Cloning site Green=Tags(s)

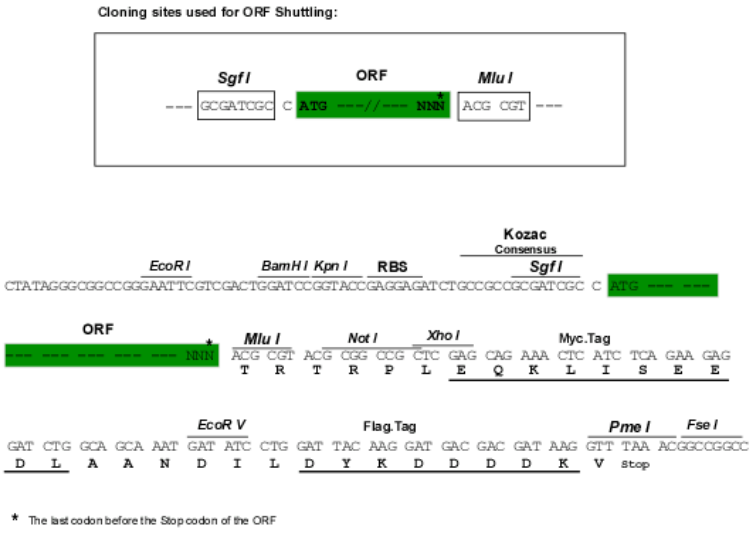
MGQPSLTWMLMVVVASWFITTAATDTSEARWCSECHSNATCTEDEAVTTCTCQEGFTGDGLTCVDLDECA
IPGAHNCSANSSCVNTPGSFSCVCPEGFRLSPGLGCTDVDECAEPGLSHCHALATCVNVVGSYLCVCPAG
YRGDGWHCECSPGSCGPGLDCVPEGDALVCADPCQAHRTLDEYWRSTEYGEGYACDTDLRGWYRFVGQGG
ARMAETCVPVLRCNTAAPMWLNGTHPSSDEGIVSRKACAHWSGHCCLWDASVQVKACAGGYYVYNLTAPP
ECHLAYCTDPSSVEGTCEECSIDEDCKSNNGRWHCQCKQDFNITDISLLEHRLECGANDMKVSLGKCQLK
SLGFDKVFMYLSDSRCSGFNDRDNRDWVSVVTPARDGPCGTVLTRNETHATYSNTLYLADEIIIRDLNIK
INFACSYPLDMKVSLKTALQPMVSALNIRVGGTGMFTVRMALFQTPSYTQPYQGSSVTLSTEAFLYVGTM
LDGGDLSRFALLMTNCYATPSSNATDPLKYFIIQDRCPHTRDSTIQVVENGESSQGRFSVQMFRFAGNYD
LVYLHCEVYLCDTMNEKCKPTCSGTRFRSGSVIDQSRVLNLGPITRKGVQATVSRAFSSLGLLKVWLPLL
LSATLTLTFQ

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mk8046_h08.zip

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_003361

ORF Size: 1920 bp

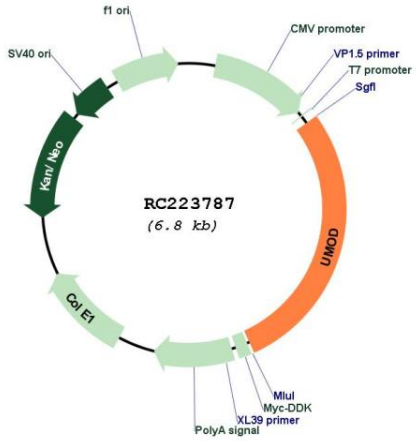
OTI Disclaimer: The molecular sequence of this clone aligns with the gene accession number as a point of reference only. However, individual transcript sequences of the same gene can differ through naturally occurring variations (e.g. polymorphisms), each with its own valid existence. This clone is substantially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

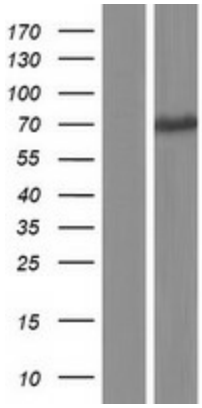
Components: The ORF clone is ion-exchange column purified and shipped in a 2D barcoded Matrix tube containing 10ug of transfection-ready, dried plasmid DNA (reconstitute with 100 ul of water).

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_003361.4
RefSeq Size:	2327 bp
RefSeq ORF:	1923 bp
Locus ID:	7369
UniProt ID:	P07911
Cytogenetics:	16p12.3
Domains:	zona_pellucida, EGF_CA, EGF, EGF
MW:	69.76 kDa
Gene Summary:	The protein encoded by this gene is the most abundant protein in mammalian urine under physiological conditions. Its excretion in urine follows proteolytic cleavage of the ectodomain of its glycosyl phosphatidylinositol-anchored counterpart that is situated on the luminal cell surface of the loop of Henle. This protein may act as a constitutive inhibitor of calcium crystallization in renal fluids. Excretion of this protein in urine may provide defense against urinary tract infections caused by uropathogenic bacteria. Defects in this gene are associated with the renal disorders medullary cystic kidney disease-2 (MCKD2), glomerulocystic kidney disease with hyperuricemia and isosthenuria (GCKDHI), and familial juvenile hyperuricemic nephropathy (FJHN). Alternative splicing of this gene results in multiple transcript variants. [provided by RefSeq, Jul 2013]

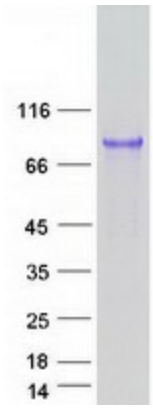
Product images:



Circular map for RC223787



Western blot validation of overexpression lysate (Cat# [LY418735]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from un-transfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC223787 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified UMOD protein (Cat# [TP323787]). The protein was produced from HEK293T cells transfected with UMOD cDNA clone (Cat# RC223787) using MegaTran 2.0 (Cat# [TT210002]).