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Product datasheet for RC220876

UCK (UCK1) (NM_031432) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	UCK (UCK1) (NM_031432) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	UCK
Synonyms:	URK1
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)

ORF Nucleotide Sequence:

>RC220876 representing NM_031432
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCCGCGATCGCC

ATGGCTTCGGCGGGAGGCGAAGACTGCGAGAGCCCCGCGCCGGAGGCCGACCGTCCGCACCAGCGGCCCT
TCCTGATAGGGGTGAGCGGCGGCACTGCCAGCGGGAAGTCGACCGTGTGTGAGAAGATCATGGAGTTGCT
GGGACAGAACGAGGTGGAACAGCGGCAGCGGAAGGTGGTCATCCTGAGCCAGGACAGGTTCTACAAGGTC
CTGACGGCAGAGCAGAAGGCCAAGGCCTTGAAAGGACAGTACAATTTTGACCATCCAGATGCCTTTGATA
ATGATTTGATGCACAGGACTCTGAAGAACATCGTGGAGGGCAAAACGGTGGAGGTGCCGACCTATGATTT
TGTGACACACTCAAGGTTACCAGAGACCACGGTGGTCTACCCTGCGGACGTGGTTCTGTTTGAGGGCATC
TTGGTGTTCTACAGCCAGGAGATCCGGGACATGTTCCACCTGCGCCTCTTCGTGGACACCGACTCCGACG
TCAGGCTGTCTCGAAGAGTTCTCCGGGACGTGCGCCGAGGGAGGGACCTGGAGCAGATTCTGACGCAGTA
CACCACCTTCGTGAAGCCGGCCTTCGAGGAGTTTTGCCTGCCGACAAAGAAGTATGCCGATGTGATCATC
CCACGAGGAGTGGACAATATGGTTGCCATCAACCTGATCGTGCAGCACATCCAGGACATTCTGAATGGTG
ACATCTGCAAATGGCACCGAGGAGGGTCCAATGGGCGGAGCTACAAGCGGACCTTTTCTGAGCCAGGGGA
CCACCCTGGGATGCTGACCTCTGGCAAACGGTCACATTTGGAGTCCAGCAGCAGACCCCAC

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA

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Protein Sequence:

>RC220876 representing NM_031432
Red=Cloning site Green=Tags(s)

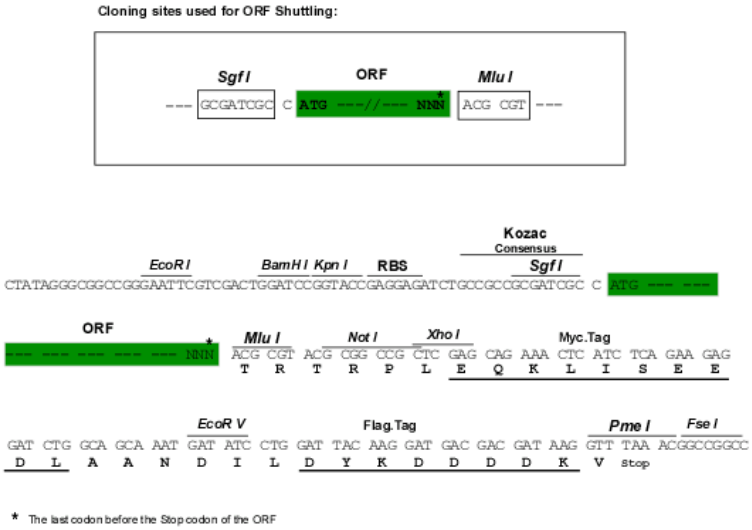
MASAGGEDCESPAPEADRPHQRPFLIGVSGGTASGKSTVCEKIMELLGQNEVEQRQRKVVILSQDRFYKV
LTAEQKAKALKGQYNFDHPDAFDNDLMHRTLKNIVEGKTVEVPTYDFVTHSRLPETTVVYPADVVLFEGI
LVFYSQEIRDMFHLRLFVDTDSDVRLSRRVLRDVRRGRDLEQILTQYTTFVKPAFEEFCLPTKKYADVII
PRGVDNMVAINLIVQHIQDILNGDICKWHRGGSNGRSYKRTFSEPGDHPGMLTSGKRSHLESSSRPH

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mk6043_a06.zip

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_031432

ORF Size: 831 bp

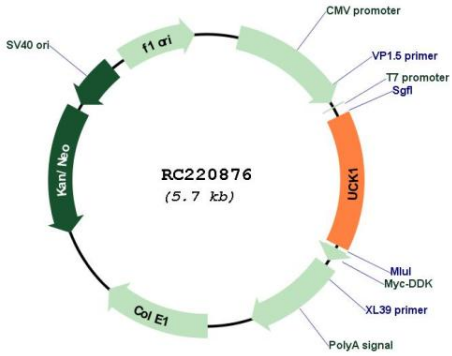
OTI Disclaimer: The molecular sequence of this clone aligns with the gene accession number as a point of reference only. However, individual transcript sequences of the same gene can differ through naturally occurring variations (e.g. polymorphisms), each with its own valid existence. This clone is substantially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

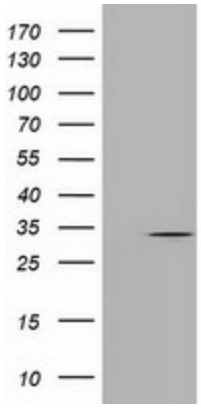
Components: The ORF clone is ion-exchange column purified and shipped in a 2D barcoded Matrix tube containing 10ug of transfection-ready, dried plasmid DNA (reconstitute with 100 ul of water).

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_031432.5
RefSeq Size:	2160 bp
RefSeq ORF:	834 bp
Locus ID:	83549
UniProt ID:	Q9HA47
Cytogenetics:	9q34.13
Domains:	PRK
Protein Families:	Druggable Genome
Protein Pathways:	Drug metabolism - other enzymes, Metabolic pathways, Pyrimidine metabolism
MW:	31.3 kDa
Gene Summary:	This gene encodes a uridine-cytidine kinase that catalyzes the phosphorylation of uridine and cytidine to uridine monophosphate (UMP) and cytidine monophosphate (CMP) but not the phosphorylation of deoxyribonucleosides or purine ribonucleosides. This enzyme can also phosphorylate uridine and cytidine analogs and uses both ATP and GTP as a phosphate donor. Alternative splicing results in multiple splice variants encoding distinct isoforms. [provided by RefSeq, May 2012]

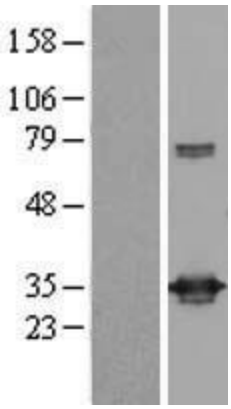
Product images:



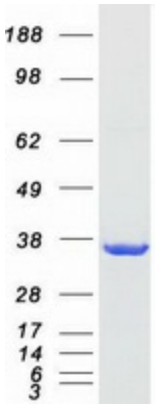
Circular map for RC220876



HEK293T cells were transfected with the pCMV6-ENTRY control (Cat# [PS100001], Left lane) or pCMV6-ENTRY UCK1 (Cat# RC220876, 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-UCK1(Cat# [TA501542]). Positive lysates [LY403114] (100ug) and [LC403114] (20ug) can be purchased separately from OriGene.



Western blot validation of overexpression lysate (Cat# [LY403114]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from un-transfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC220876 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified UCK1 protein (Cat# [TP320876]). The protein was produced from HEK293T cells transfected with UCK1 cDNA clone (Cat# RC220876) using MegaTran 2.0 (Cat# [TT210002]).