

Product datasheet for RC227297

ULK2 (NM_001142610) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	ULK2 (NM_001142610) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	ULK2
Synonyms:	ATG1B; Unc51.2
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>RC227297 ORF sequence Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGGAGGTGGTGGGTGACTTCGAGTACAGCAAGAGGGATCTCGTGGGACACGGGGCCTTCGCCGTGGTCT
TCCGGGGCGGCACCGCCAGAAAAGTATTGGGAGGTAGCTATTAAGTATTAATAAAAAGAAGTGTG
AAAATCACAATACTGCTTGGAAAGGAAATTAATCTTAAAGGAAGTTCAGCATGAAAATATTGTAGCA
CTCTATGATGTTAGGAATTACCAACTCTGTCTTTTGGTGATGGAGTATTGCAATGGTGGAGACTCG
CAGATTATTTGCAAGCGAAAGGGACTCTCAGTGAAGACACGATCAGAGTGTTCATGATCAGATTGCTGC
TGCCATGCGAATCCTGCACAGCAAAGGAATCATCCACAGAGATCTCAAACACAGAACATCTTGCTGTCC
TATGCCAATCGCAGAAAATCAAGTGTGAGTATTTCGATCAAAAATAGCGGATTTTGGTTTTGCTCGTT
ACCTACATAGTAACATGATGGCTGCAACACTGTGTGGATCCCGATGTACATGGCTCCTGAGGTTATTAT
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AAACCACCTTTTCAGGCCAATAGTCTCAAGACTTAAGGATGTTTTATGAAAAAACAGGAGCTTAATGC
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AGATAGAATGGACTTTGAAGCGTTTTTGGCCATCCTTTCTTGAGCAAGTCCAGTAAAAAATCTTGC
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TGCTGCTGTGGGCATCCTCAGGGCCATGACTCCAGGAGTAGAACTCCTCAGGTTCTCCAGTGCCACAAG
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 ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence:

>RC227297 protein sequence
 Red=Cloning site Green=Tags(s)

MEVVGDFEYSKRDLVGHGAFVAVFRGRHRQKTDWEVAIKSINKKNLSKSQILLGKEIKILKELQHENIVA
 LYDVQELPNSVFLVMEYCNGDGLADYLQAKGTLSEDTIRVFLHQIAAAMRILHSGKIHRDLKPNILLS
 YANRRKSSVSGIRIKIADFGFARYLHNSMMAATLCGSPMYMAPEVIMSQHYDAKADLWSIGTVIYQCLVG
 KPPFQANSPODLRMFYEKNRSLMPSIPRETSPYLANLLGLLQRNQKDRMDFEAFSSHFPLEQGPVKKSC
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 APAGACGGVLAPPAGTAASSKAVLFTVGSPPHSAAPTCTHMFLRTRTTSVGPSNSGGSLCAMSGRVCVG
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 LSPSTAVKQVVKNLNERYKFCITMCKKLEKLNRFSDKQRFIDEINSVTAEKLIYNCAVEMVQSAALDE
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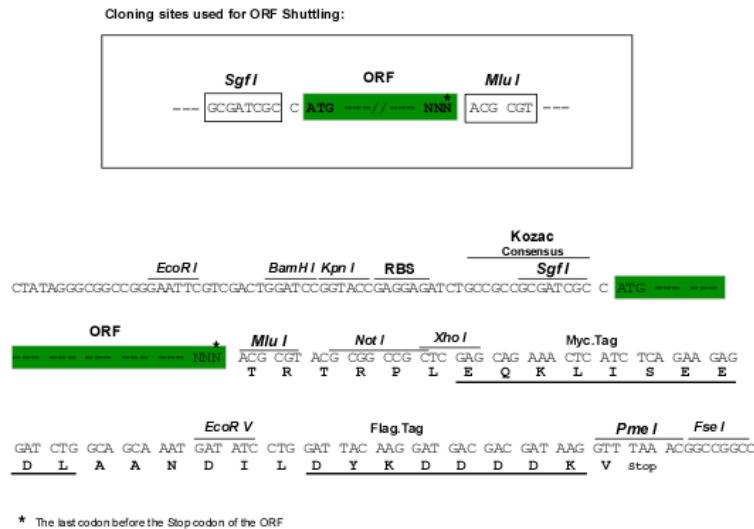
Chromatograms:

https://cdn.origene.com/chromatograms/mk6141_f09.zip

Restriction Sites:

SgfI-MluI

Cloning Scheme:



ACCN: NM_001142610

ORF Size: 3108 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_001142610.1](#), [NP_001136082.1](#)

RefSeq Size: 3924 bp

RefSeq ORF: 3111 bp

Locus ID: 9706

UniProt ID: [Q8IYT8](#)

Cytogenetics: 17p11.2

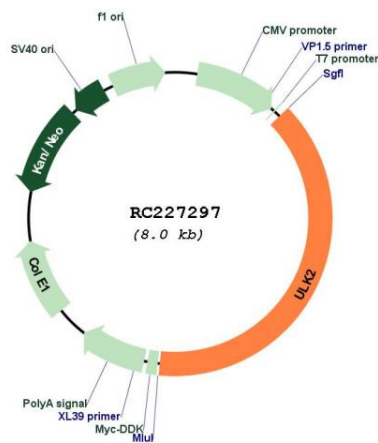
Protein Families: Druggable Genome, Protein Kinase

Protein Pathways: mTOR signaling pathway, Regulation of autophagy

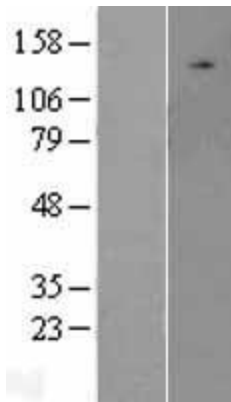
MW: 112.7 kDa

Gene Summary: This gene encodes a protein that is similar to a serine/threonine kinase in *C. elegans* which is involved in axonal elongation. The structure of this protein is similar to the *C. elegans* protein in that both proteins have an N-terminal kinase domain, a central proline/serine rich (PS) domain, and a C-terminal (C) domain. The gene is located within the Smith-Magenis syndrome region on chromosome 17. Alternatively spliced transcript variants encoding the same protein have been identified. [provided by RefSeq, Dec 2008]

Product images:



Circular map for RC227297



Western blot validation of overexpression lysate (Cat# [LY428207]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC227297 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).