

## Product datasheet for **SC323381**

### ULK2 (NM\_014683) Human Untagged Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	ULK2 (NM_014683) Human Untagged Clone
Tag:	Tag Free
Symbol:	ULK2
Synonyms:	ATG1B; Unc51.2
Mammalian Cell Selection:	None
Vector:	<u><a href="#">pCMV6-XL5</a></u>
E. coli Selection:	Ampicillin (100 ug/mL)



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**Fully Sequenced ORF:** >NCBI ORF sequence for NM\_014683, the custom clone sequence may differ by one or more nucleotides

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ATGGAGGTGGTGGTGACTTCGAGTACAGCAAGAGGGATCTCGTGGGACACGGGGCCTTCGCCGTGGTCT
TCCGGGGCGGCACCGCCAGAAAATGATTGGGAGGTAGCTATTAAGTATTAATAAAAAAGAACTTGTC
AAAATCACAATACTGCTTGAAAGGAAATTAATCTTAAAGGAACTCAGCATGAAAAATTGTAGCA
CTCTATGATGTTTCAAGGAATTACCAACTCTGTCTTTTGGTGATGGAGTATTGCAATGGTGGAGACCTCG
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TGCCATGCGAATCCTGCACAGCAAAGGAATCATCCACAGAGATCTCAAACACAGAACATCTTGCTGTCC
TATGCCAATCGCAGAAAAACAAGTGTGAGTATTTCGCATCAAAATAGCGGATTTTGGTTTTGCTCGTT
ACCTACATAGTAACATGATGGCTGCAACACTGTGTGGATCCCGATGTACATGGCTCCTGAGGTTATTAT
GTCTCAACATTATGATGCTAAGGCTGACTTGTGGAGCATAGGAACAGTATATACCAATGCCTAGTTGGA
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AGATAGAATGGACTTTGAAGCATTTTTTAGCCATCCTTTTCTTGAGCAAGGTCCAGTAAAAAAATCTTGC
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GGAGTTCTGACTGGTTCTTAAAACTCCTTTGCCAACAATCATTGGCTCTCTACTAAGACCACAGCTCC
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AGGAAAGACTCCTATATGTCGACATCAGGGCAGCACAGACAGTTAAATACAGAACGACCAATGGATATA
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TCTTCACTGTAGGGTCTCCTCCACACAGTGCAGCAGCCCCACTGTACCCACATGTTCTTGAACAAG
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TCCCGCCTGGCCAGGCTTCCGCTCTTCCCTCCAGGAGCAGAGGCAGCTCCAGCCTGAGTACGTGC
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GCTGATGGAGCGGGAACACACAGACACCTTACGCCATCTGAATGTGATGCTGATGTTCACTGAGTGTG
CTGGACCTGACAGCCATGAGGGGAGGAAACCCTGAGCTGTGCACATCTGCTGTGCTTGTACCAGATCC
AGGAGAGTGTGGTGGTGGACCAGATCAGTCAGCTGAGCAAAGACTGGGGCGGGTGGAGCAGCTGGTGT
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CTGAGCCCATCCACAGCTGTGAAACAAGTTGTCAAGAATCTGAACGAACGATATAAATTCTGCATCACA
TGTGCAAGAACTTACAGAAAAGCTGAATCGATTCTTCTGACAAACAGAGGTTTATTGATGAAATCAA
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ATGTTTACAGCAGACCGAAGATATTGTTTATCGCTATCATAAGGCAGCCCTCTTTTGAAGGCTAAGTA
GGATTCTACAGGACCCTGCAGATATTGAAAATGTCATAAATATAAATGTAGTATTGAGAGAAGACTGTC
GGCCTCTGCCATAGCACCGCAACCGTGTGA
    
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<b>5' Read Nucleotide Sequence:</b>	>OriGene 5' read for mutant NM_014683 unedited CCCGCCGTTGAGCAATGGGCGGTAGGCGTGTACGGTGGGAGGTCTATATAAGCAGAGCTCGTTTAGTGA ACCGTCAGAAATTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGGCACGAGGCCGAGCGGGGAG GGCCGAGGAGGCCGACGAGCTGGGGATGGAGAGTACGGGGCCCTCACTGCCTCAGAGCGCGTGTGCGG CTCTGGGCGCGCACAGTGACGGTGACGGCACCCCTGGCCCGGCAGCGCCGAGGCCGCTTCGCCAGACAGC CAGCGGCCGCGCAGGCCGGCCATGAGCGGCAGGGGCCGGCCGGGCTCGCTGACCTGGCTTCGGC GCGGCAGCTTCCCAGTTCCGCTTCCGCTCTCGGCATGAAGAGTCCGCCCGCCGGGGCTGGCGCTT GCCAAAACCGGCCGAGGCTGGCGCGCTCCGGGCCCGCGGAGCCGCTTGAATCCTGGCCCGAATG GCCGCCCGCGGTCCGCGTGTGCCCGGGGCCGCGCCCTGAAGGGGGGTG
<b>Kinase Domain Sequence:</b>	>SC323381 kinase domain raw sequence. By performing <a href="#">BLASTX</a> analysis with this sequence against NCBI reference protein database, you can confirm the presence of the kinase-deficient mutation CSATGMGCAATGGGCGGTAGGCGTGTACGGTGGGAGGTCTATATAAGCAGAGCTCGTTTAGTGAACCGTC AGAATTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGGCACGAGGCCGAGCGGGGAGGGCCGA GGAGGCCCGACGAGCTGGGGATGGAGAGTACGGGCCCTCACTGCCTCAGAGCGCGTGTGCGGCTCTGG GCGCGCACAGTGACGGTGACGGCACCCCTGGCCCGGCAGCGCCGA
<b>Restriction Sites:</b>	Please inquire
<b>ACCN:</b>	NM_014683
<b>Insert Size:</b>	5730 bp
<b>OTI Disclaimer:</b>	Our molecular clone sequence data has been matched to the reference identifier above as a point of reference. Note that the complete sequence of our molecular clones may differ from the sequence published for this corresponding reference, e.g., by representing an alternative RNA splicing form or single nucleotide polymorphism (SNP).
<b>OTI Annotation:</b>	This kinase-deficient mutant clone was generated by created by site-directed mutagenesis from the corresponding wild-type clone. See details in "Application of active and kinase-deficient kinome collection for identification of kinases regulating hedgehog signaling." <a href="#">Cell</a> , 2008 May p536-548.
<b>Components:</b>	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).
<b>Reconstitution Method:</b>	<ol style="list-style-type: none"> <li>1. Centrifuge at 5,000xg for 5min.</li> <li>2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.</li> <li>3. Close the tube and incubate for 10 minutes at room temperature.</li> <li>4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom.</li> <li>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.</li> </ol>
<b>RefSeq:</b>	<a href="#">NM_014683.2</a> , <a href="#">NP_055498.2</a>
<b>RefSeq Size:</b>	5807 bp
<b>RefSeq ORF:</b>	3111 bp
<b>Locus ID:</b>	9706
<b>UniProt ID:</b>	<a href="#">Q8IYT8</a>

<b>Cytogenetics:</b>	17p11.2
<b>Domains:</b>	pkinase, TyrKc, S_TKc
<b>Protein Families:</b>	Druggable Genome, Protein Kinase
<b>Protein Pathways:</b>	mTOR signaling pathway, Regulation of autophagy
<b>Gene Summary:</b>	<p>This gene encodes a protein that is similar to a serine/threonine kinase in <i>C. elegans</i> which is involved in axonal elongation. The structure of this protein is similar to the <i>C. elegans</i> 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]</p> <p>Transcript Variant: This variant (1) represents the longer transcript. Both variants 1 and 2 encode the same protein.</p>