

## Product datasheet for **SC323667**

### ULK3 (NM\_001099436) Human Untagged Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	ULK3 (NM_001099436) Human Untagged Clone
Tag:	Tag Free
Symbol:	ULK3
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:** >OriGene ORF within SC323667 sequence for NM\_001099436 edited (data generated by NextGen Sequencing)

```

ATGGCGGGGCCCGGTGGGGTCCCCCGCGCCTGGACGGCTTCATCCTCACCGAGCGCCTG
GGCAGCGGCACGTACGCCACGGTGTACAAGGCCTACGCCAAGAAGGACACTCGTGAAGTG
GTAGCCATAATGTGTGTAGCCAAGAAAAGTCTGAACAAGGCATCGGTGGAGAACCTCCTC
ACGGAGATTGAGATCCTCAAGGGCATTGACATCCCCACATTGTGCAGCTGAAAGACTTT
CAGTGGGACAGTGACAATATCTACCTCATCATGGAGTTTTGCGCAGGGGGCGACCTGTCT
CGTTTCATCCATACCCCGAGGATTCTGCCTGAGAAGGTGGCGCGTGTCTTCATGCAGCAA
TTAGCTAGCGCCCTGCAATTCTGCATGAACGGAATATCTCTCACCTGGATCTGAAGCCA
CAGAACATTCTACTGAGCTCCTTGAGAAGCCCCACCTAAAACCTGGCAGACTTTGGTTTC
GCACAACACATGTCCCCGTGGGATGAGAAGCACGTGCTCCGTGGCTCCCCCTCTACATG
GCCCCGAGATGGTGTGCCAGCGGCAGTATGACGCCCGCGTGGACCTCTGGTCCATGGGG
GTCATCCTGTATGAAGCCCTCTTCGGGCAGCCCCCTTTGCTCCAGGTCGTTCTCGGAG
CTGGAAGAGAAGATCCGTAGCAACCGGGTCATCGAGCTCCCTTTCGGGCCCTGTCTCC
CGAGACTGCCGGACCTACTGCAGCGGCTCCTGGAGCGGGACCCAGCCGTCGCATCTCC
TTCCAGGACTTTTTTGGCCACCCCTGGGTGGACCTGGAGCACATGCCAGTGGGGAGAGT
CTGGGGCGAGCAACCGCCCTGGTGGTGCAGGCTGTGAAGAAAGACCAGGAGGGGGATTCA
GCAGCTGCCTTACTACTACTGCAAGGCTCTGGACTTCTTTGTACCTGCCCTGCACTAT
GAAGTGGATGCCAGCGGAAGGAGGCAATTAAGGCAAAGTGGGGCAGTACGTGTCCCGG
GCTGAGGAGCTCAAGGCCATCGTCTCCTTCCAATCAGGCCCTGCTGAGGCAGGGGACC
TCTGCCGAGACCTGCTCAGAGAGATGGCCCGGACAAGCCACGCCTCCTAGCTGCCCTG
GAAGTGGCTTTCAGCTGCCATGGCCAAGGAGGAGCCCGCGGGGGAGCAGGATGCCCTG
GACCTGTACCAGCACAGCCTGGGGGAGCTACTGCTGTTGCTGGCAGCGGAGCCCCGGGG
CGGAGGCCGGGAGCTGCTTACACTGAGGTTCAGAACCTCATGGCCCGAGCTGAATCTTG
AAGGAGCAGGTCAAGATGAGGGAATCTCGCTGGGAAGCTGACACCCTGGACAAAGAGGA
CTGTCCGAATCTGTTCTAGCTCTTGCACCCTTCAGTGA
    
```

Clone variation with respect to NM\_001099436.1  
131 a=>t

**5' Read Nucleotide Sequence:** >OriGene 5' read for mutant NM\_001099436 unedited

```

CCCCCGGTCCCAGCAACGGCGGTAGGCGCTGTACGGTTGGGAGGTTTCATATAAGCAGAGCTCGTTT
GAACCGTCAGAATTTTGAATACGACTCACTATAGGGCGGCCGGAATTCGGCACGAGCCGCGCCTGGAC
GGCTTCATCCTCACCGAGCGCCTGGGCAGCGGCACGTACGCCACGGTGTACAAGGCCTACGCCAAGAAGG
ACACTCGTGAAGTGGTAGCCATAATGTGTGTAGCCAAGAAAAGTCTGAACAAGGCATCGGTGGAGAACCT
CCTCACGGAGATTGAGATCCTCAAGGGCATTGACATCCCCACATTGTGCAGCTGAAAGACTTTTCAGTGG
GACAGTGACAATATCTACCTCATCATGGAGTTTTTGGCAGGGGGCGACCCTGTCTCGTTCATCCATA
CCCCGAGGATTTCTGCCTGAAAAGGTGCCGCGGTGTCTTCATGCAGCATTAGCTAGCCGCCCTGCAT
TCTTGCATGAAACGGAATTATCCTCTACCTGATCCGGAGCCCCAGAACATCTACTGACCTCCTGGAAAA
GCCACCTAAAACCTGGCAAACTTTGGTTTGAACACACAGGTCCCTTGGTGAAGCCTTCCCCGGGTCTC
CCCTCTAATGCCCAATTGGTGGCACGCGATTAGACCCCTTGACTTTGTCCAGGGGGCTCTCGTGTAAAGC
CTTTGGCAGCCCTTGCCAGTGTCTCTGACTGAAGAATCTGAAACGGTATAGTCTTGGCCTGTTTGAAT
CGCACTCGACGCCTGGGACAGCGTATATTGATTGACTGACGATCCTTGGACTGCAACCGTTGACGA
    
```

**Kinase Domain Sequence:** >SC323667 kinase domain raw sequence. By performing [BLASTX](#) analysis with this sequence against NCBI reference protein database, you can confirm the presence of the kinase-deficient mutation

```

CTCTGMGCAATGGGCGGTAGGCGTGTACGGTGGGAGGTCTATATAAGCAGAGCTCGTTT
AGAATTTTGAATACGACTCACTATAGGGCGGCCGGAATTCGGCACGAGCCGCGCCTGGACGGCTTCAT
CCTCACCGAGCGCCTGGGCAGCGGCACGTACGCCACGGTGTACAAGGCCTACGCCAAGAAGGACACTCGT
GAAGTGGTAGCCATAATGTGTGTAGCCAAGAAAAGTCTGAACAAG
    
```

**Restriction Sites:** Please inquire

<b>ACCN:</b>	NM_001099436
<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. 2008 May p536-548.</a>
<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_001099436.1</a> , <a href="#">NP_001092906.1</a>
<b>RefSeq Size:</b>	2635 bp
<b>RefSeq ORF:</b>	1419 bp
<b>Locus ID:</b>	25989
<b>UniProt ID:</b>	<a href="#">Q6PHR2</a>
<b>Cytogenetics:</b>	15q24.1
<b>Protein Families:</b>	Druggable Genome, Protein Kinase
<b>Protein Pathways:</b>	mTOR signaling pathway, Regulation of autophagy
<b>Gene Summary:</b>	<p>Serine/threonine protein kinase that acts as a regulator of Sonic hedgehog (SHH) signaling and autophagy. Acts as a negative regulator of SHH signaling in the absence of SHH ligand: interacts with SUFU, thereby inactivating the protein kinase activity and preventing phosphorylation of GLI proteins (GLI1, GLI2 and/or GLI3). Positively regulates SHH signaling in the presence of SHH: dissociates from SUFU, autophosphorylates and mediates phosphorylation of GLI2, activating it and promoting its nuclear translocation. Phosphorylates in vitro GLI2, as well as GLI1 and GLI3, although less efficiently. Also acts as a regulator of autophagy: following cellular senescence, able to induce autophagy.[UniProtKB/Swiss-Prot Function]</p> <p>Transcript Variant: This variant (1) encodes the longest isoform (a).</p>