

Product datasheet for **RG220209**

ULK3 (NM_001099436) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	ULK3 (NM_001099436) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	ULK3
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)



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ORF Nucleotide Sequence:

>RG220209 representing NM_001099436
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**GCGATCGCC**

ATGGCGGGGCCCGCTGGGGTCCCCCGCCTGGACGGCTTCATCCTCACCGAGCGCTGGCGACGGCA
 CGTACGCCACGGTGTACAAGGCCTACGCCAAGAAGGACACTCGTGAAGTGGTAGCCATAAAGTGTGTAGC
 CAAGAAAAGTCTGAACAAGGCATCGGTGGAAGAACCTCCTCACGGAGATTGAGATCCTCAAGGCATTGCA
 CATCCCCACATTGTGCAGCTGAAAGACTTTCAGTGGGACAGTGACAATATCTACCTCATCATGGAGTTTT
 GCGCAGGGGGCGACCTGTCTCGCTTCATCCATACCCGACGATTCTGCCTGAGAAGGTGGCGCTGTCTT
 CATGCAGCAATTAGCTAGCGCCCTGCAATTCCTGCATGAACGGAATATCTCTCACCTGGATCTGAAGCCA
 CAGAACATTCTACTGAGCTCCTTGAGAAGCCCCACCTAAAAGTGGCAGACTTTGGTTTCGCACAACACA
 TGTCCCCGTGGGATGAGAAGCACGTGCTCCGTGGCTCCCCCTACATGGCCCCGAGATGGTGTGCCA
 GCGGCAGTATGACGCCCGGTGGACCTCTGGTCCATGGGGGTATCCTGTATGAAGCCCTCTTCGGGCGAG
 CCCCCCTTGCCTCCAGTCTGTTCTCGGAGCTGGAAGAGAAGATCCGTAGCAACCGGGTATCGAGCTCC
 CCTTGGCGCCCTGCTCTCCCGAGACTGCCGGGACCTACTGCAGCGGCTCCTGGAGCGGGACCCAGCCG
 TCGCATCTCCTCCAGGACTTTTTTGGCACCCCTGGGTGGACCTGGAGCACATGCCAGTGGGGAGAGT
 CTGGGGCGAGCAACCGCCTGGTGGTGCAGGCTGTGAAGAAAGACCAGGAGGGGGATTACAGCAGTGCCT
 TATCACTCTACTGCAAGGCTCTGGACTTCTTTGTACCTGCCCTGCACTATGAAGTGGATGCCAGCGGAA
 GGAGGCAATTAAGGCAAAGGTGGGGCAGTACGTGTCCCGGGCTGAGGAGCTCAAGGCCATCGTCTCCTCT
 TCCAATCAGGCCCTGCTGAGGCAGGGGACCTCTGCCGAGACCTGCTCAGAGAGATGGCCCGGGACAAGC
 CACGCCCTCTAGCTGCCCTGGAAGTGGCTTCAGCTGCCATGGCCAAGGAGGAGGCCCGCGGGGAGCA
 GGATGCCCTGGACCTGTACCAGCACAGCCTGGGGGAGTACTGCTGTTGCTGGCAGCGGAGCCCCGGGC
 CGGAGGCGGGAGCTGCTTCACTGAGGTTCAGAACCTCATGGCCCGAGCTGAATACTTGAAGGAGCAGG
 TCAAGATGAGGGAATCTCGCTGGGAAGCTGACACCCTGGACAAAGAGGGACTGTCGGAATCTGTTCTGAG
 CTCTTGCACCCTCAG

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

Protein Sequence:

>RG220209 representing NM_001099436
 Red=Cloning site Green=Tags(s)

MAGPGWGPRLDGFILTERLGSPTYATVYKAYAKKDTREVVAIKCVAKKSLNKASVENLLTEIEILKGI
 RHPHIVQLKDFQWSDNIYLIMEFCAGGDLSRFIHTRRILPEKVARVFMQQLASALQFLHERNISHLDLKP
 QNILLSSLEKPHLKLADFGFAQHMSPWDEKHLVRSPLYMAPEMVCQRQYDARVDLWSMGVILYEALFGQ
 PPFASRSFSELEEKIRSNRVIELPLRPLL SRDCRDLLQRLLERDPSRRI SFQDFFAHPWVDLEHMP
 SGESLGRATALVVQAVKQDQEGDSAAALSLYCKALDFVFPALHYEVDAQRKEAIKAKVGQYVSRAEELKAI
 VSSSNQALLRQGTSARDLLREMARKPRLLAALVASAAMAKEEAAGGEQDALDLYQHSLGELLLLLLAAEPP
 GRRRELLHTEVQNLMARAEYLKEQVKMRESRWEADTLDEGLSESVRSSTLQ

TRTRPLE - GFP Tag - V

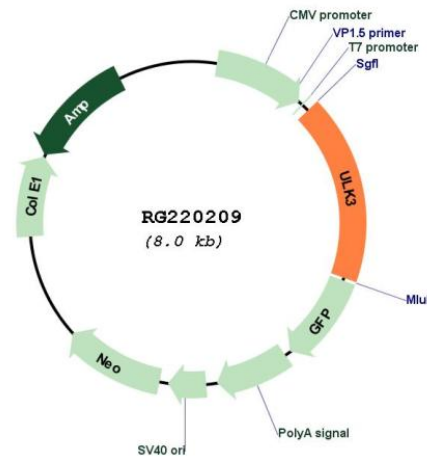
Restriction Sites:

Sgfl-Mlul

Cloning Scheme:



Plasmid Map:



ACCN: NM_001099436

ORF Size: 1416 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:	<ol style="list-style-type: none">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_001099436.4
RefSeq Size:	2635 bp
RefSeq ORF:	1419 bp
Locus ID:	25989
UniProt ID:	Q6PHR2
Cytogenetics:	15q24.1
Protein Families:	Druggable Genome, Protein Kinase
Protein Pathways:	mTOR signaling pathway, Regulation of autophagy
Gene Summary:	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]