

Product datasheet for **RG238421**

ULK3 (NM_001284364) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	ULK3 (NM_001284364) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	ULK3
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)
ORF Nucleotide Sequence:	>RG238421 representing NM_001284364. Blue=ORF Red=Cloning site Green=Tag(s)

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GCTCGTTTAGTGAACCGTCAGAATTTTGTAAACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTG
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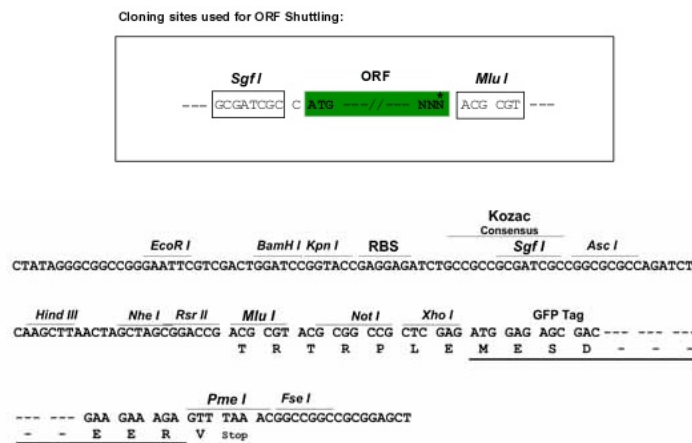
[View online »](#)

Protein Sequence: >Peptide sequence encoded by RG238421
 Blue=ORF Red=Cloning site Green=Tag(s)

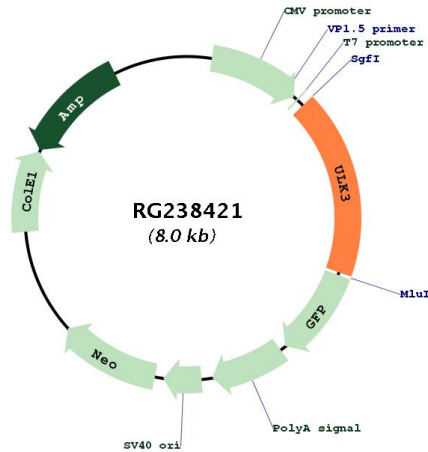
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 FRRVEEDHSNTELGIVEYQHAFKTPDADAGEERV

Restriction Sites: SgfI-MluI

Cloning Scheme:



Plasmid Map:



ACCN: NM_001284364

ORF Size: 1410 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).

RefSeq: [NM_001284364.3](#)

RefSeq Size: 2638 bp

RefSeq ORF: 1413 bp

Locus ID: 25989

UniProt ID: [Q6PHR2](#)

Cytogenetics: 15q24.1

Protein Families: Druggable Genome, Protein Kinase

Protein Pathways: mTOR signaling pathway, Regulation of autophagy

MW: 53.7 kDa

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]