

Product datasheet for MR211538L3V

OriGene Technologies, Inc.

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Ulk1 (NM_009469) Mouse Tagged ORF Clone Lentiviral Particle

Product data:

Product Type: Lentiviral Particles

Product Name: Ulk1 (NM_009469) Mouse Tagged ORF Clone Lentiviral Particle

Symbol: Ulk1

Synonyms: AU041434; mKIAA0722; Unc51.1

Mammalian Cell

Selection:

Puromycin

Vector: pLenti-C-Myc-DDK-P2A-Puro (PS100092)

 Tag:
 Myc-DDK

 ACCN:
 NM_009469

ORF Size: 3153 bp

ORF Nucleotide

Sequence:

The ORF insert of this clone is exactly the same as(MR211538).

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.

RefSeq: <u>NM 009469.3</u>, <u>NP 033495.2</u>

 RefSeq Size:
 5215 bp

 RefSeq ORF:
 3156 bp

 Locus ID:
 22241

 UniProt ID:
 070405

Cytogenetics: 5 F







Gene Summary:

Serine/threonine-protein kinase involved in autophagy in response to starvation. Acts upstream of phosphatidylinositol 3-kinase PIK3C3 to regulate the formation of autophagophores, the precursors of autophagosomes. Part of regulatory feedback loops in autophagy: acts both as a downstream effector and negative regulator of mammalian target of rapamycin complex 1 (mTORC1) via interaction with RPTOR. Activated via phosphorylation by AMPK and also acts as a regulator of AMPK by mediating phosphorylation of AMPK subunits PRKAA1, PRKAB2 and PRKAG1, leading to negatively regulate AMPK activity. May phosphorylate ATG13/KIAA0652 and RPTOR; however such data need additional evidences. Plays a role early in neuronal differentiation and is required for granule cell axon formation. May also phosphorylate SESN2 and SQSTM1 to regulate autophagy (PubMed:25040165). [UniProtKB/Swiss-Prot Function]