

Product datasheet for RC400274

OriGene Technologies, Inc.

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LKB1 (STK11) (NM_000455) Human Mutant ORF Clone

Product data:

Product Type: Mutant ORF Clones

Product Name: LKB1 (STK11) (NM_000455) Human Mutant ORF Clone

Mutation Description: P281fs*6

Affected Codon#: 281

Affected NT#: c.842

Nucleotide Mutation: STK11 Mutant (P281fs*6), Myc-DDK-tagged ORF clone of Homo sapiens serine/threonine

kinase 11 (STK11) as transfection-ready DNA

Effect: Frameshift

Symbol: LKB1

Synonyms: hLKB1; LKB1; PJS

E. coli Selection: Kanamycin (25 ug/mL)

Mammalian Cell Neomycin

Selection:

Vector: pCMV6-Entry (PS100001)

Tag: Myc-DDK
ACCN: NM 000455

ORF Size: 855 bp
Restriction Sites: Sgfl-Mlul

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ORF Nucleotide Sequence:

>RC400274 representing NM_000455
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCCGCCGCGATCGCC

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATTACAAGGATGACGACGATAAGGTTTAA

Protein Sequence:

>RC400274 representing NM_000455 Red=Cloning site Green=Tags(s)

MEVVDPQQLGMFTEGELMSVGMDTFIHRIDSTEVIYQPRRKRAKLIGKYLMGDLLGEGSYGKVKEVLDSE TLCRRAVKILKKKKLRRIPNGEANVKKEIQLLRRLRHKNVIQLVDVLYNEEKQKMYMVMEYCVCGMQEML DSVPEKRFPVCQAHGYFCQLIDGLEYLHSQGIVHKDIKPGNLLLTTGGTLKISDLGVAEALHPFAADDTC RTSQGSPAFQPPEIANGLDTFSGFKVDIWSAGVTLYNITTGLYPFEGDNIYKLFENIGKGSYAIPGDCGP RSLTC

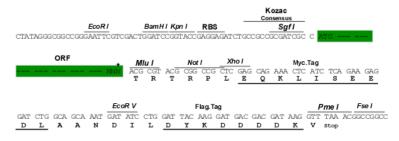
TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Restriction Sites: Sgfl-Mlul



Cloning Scheme:





^{*} The last codon before the Stop codon of the ORF

OTI Disclaimer:

Due to the inherent nature of this plasmid, standard methods to replicate additional amounts of DNA in E. coli are highly likely to result in mutations and/or rearrangements. Therefore, OriGene does not guarantee the capability to replicate this plasmid DNA. Additional amounts of DNA can be purchased from OriGene with batch-specific, full-sequence verification at a reduced cost. Please contact our customer care team at custsupport@origene.com or by calling 301.340.3188 option 3 for pricing and delivery.

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).

Note:

Plasmids are not sterile. For experiments where strict sterility is required, filtration with

0.22um filter is required.

 RefSeq:
 NP 000446

 RefSeq Size:
 3286 bp

 RefSeq ORF:
 1302 bp

 Locus ID:
 6794

Cytogenetics: 19p13.3

Domains: pkinase, TyrKc, S_TKc



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Protein Families: Druggable Genome, Protein Kinase

Protein Pathways: Adipocytokine signaling pathway, mTOR signaling pathway

MW: 31 kDa

Gene Summary: This gene, which encodes a member of the serine/threonine kinase family, regulates cell

polarity and functions as a tumor suppressor. Mutations in this gene have been associated with Peutz-Jeghers syndrome, an autosomal dominant disorder characterized by the growth of polyps in the gastrointestinal tract, pigmented macules on the skin and mouth, and other neoplasms. Alternate transcriptional splice variants of this gene have been observed but have

not been thoroughly characterized. [provided by RefSeq, Jul 2008]