

Product datasheet for RC402207

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OriGene Technologies, Inc.

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: E130X

Affected Codon#: 130

Affected NT#: 388

Nucleotide Mutation: STK11 Mutant (E130X), Myc-DDK-tagged ORF clone of Homo sapiens serine/threonine kinase

11 (STK11) as transfection-ready DNA

Effect: Peutz-Jeghers syndrome

Symbol: STK11

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: 387 bp
Restriction Sites: Sgfl-Mlul

LKB1 (STK11) (NM_000455) Human Mutant ORF Clone - RC402207

ORF Nucleotide Sequence:

>RC402207 representing NM_000455

Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCCGCCGCGATCGCC

ATGGAGGTGGTGGACCCGCAGCAGCTGGGCATGTTCACGGAGGGCGAGCTGATGTCGGTGGGTATGGACA CGTTCATCCACCGCATCGACTCCACCGAGGTCATCTACCAGCCGCCGCCAAGCGGGCCAAGCTCATCGG CAAGTACCTGATGGGGGACCTGCTGGGGGAAGGCTCTTACGGCAAGGTGAAGGAGGTGCTGGACTCGGAG ACGCTGTGCAGGAGGGCCGTCAAGATCCTCAAGAAGAAGAAGTTGCGAAGGATCCCCAACGGGGAGGCCA ACGTGAAGAAGAAGTTCACCAGCTGGTGGATGTTT ATACAACGAAGAAGAAGAAGAAGAAGAAGTGCATCCAGCTGGTGGATGTTT ATACAACGAAGAAGAAGAAAAATGTATATGGTGATG

AGCGGACCGACGCGTACGCCGCCCCCCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTCGGATTACAAGGATGACGACGA TAAGGTTTAA

Protein Sequence:

>RC402207 representing NM_000455 Red=Cloning site Green=Tags(s)

MEVVDPQQLGMFTEGELMSVGMDTFIHRIDSTEVIYQPRRKRAKLIGKYLMGDLLGEGSYGKVKEVLDSE TLCRRAVKILKKKKLRRIPNGEANVKKEIQLLRRLRHKNVIQLVDVLYNEEKQKMYMVM

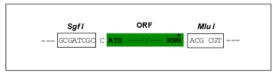
SGPTRTRRLEQKLISEEDLAANDILDYKDDDDK**V**

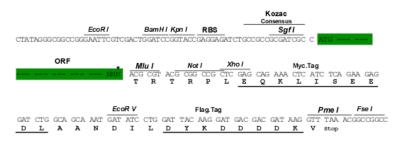
Restriction Sites:

Sgfl-Mlul

Cloning Scheme:

Cloning sites used for ORF Shuttling:





^{*} 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 customport@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. <u>More info</u>

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: NP 000446

RefSeq Size: 387 bp
RefSeq ORF: 1302 bp
Locus ID: 6794
Cytogenetics: 19p13.3

Domains: pkinase, TyrKc, S_TKc

Protein Families: Druggable Genome, Protein Kinase

Protein Pathways: Adipocytokine signaling pathway, mTOR signaling pathway

MW: 14.2 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]