

## Product datasheet for RC402191

### 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:** E57X

Affected Codon#: 57

Affected NT#: 169

Nucleotide Mutation: STK11 Mutant (E57X), 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 No

Selection:

Neomycin

**Vector:** pCMV6-Entry (PS100001)

Tag: Myc-DDK
ACCN: NM 000455

ORF Size: 168 bp Restriction Sites: Sgfl-Mlul

ORF Nucleotide >RC402191 representing NM\_000455

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

 ${\tt TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC}$ 

GCCGCGATCGCC

ATGGAGGTGGTGGACCCGCAGCAGCTGGGCATGTTCACGGAGGGCGAGCTGATGTCGGTGGGTATGGACACGTTCATCCACCGCATCGACTCCACCGAGGTCATCTACCAGCCGCCGCAAGCGGGCCAAGCTCATCGG

CAAGTACCTGATGGGGGACCTGCTGGGG

 ${\bf AGCGGACCG} {\bf ACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCC}$ 

TGGATTACAAGGATGACGACGA TAAGGTTTAA





**Protein Sequence:** >RC402191 representing NM\_000455

Red=Cloning site Green=Tags(s)

MEVVDPQQLGMFTEGELMSVGMDTFIHRIDSTEVIYQPRRKRAKLIGKYLMGDLLG

**SGPTRTRRL**EQKLISEEDLAANDILDYKDDDDK**V** 

**Restriction Sites:** 

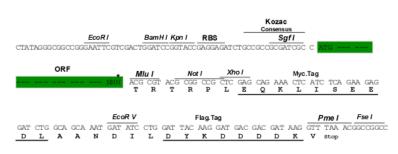
Sgfl-Mlul

**Cloning Scheme:** 

Cloning sites used for ORF Shuttling:

Sgf1 ORF Miu I

--- GCGATCGC C ATG --- NIM ACG CGT ---



<sup>\*</sup> 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 <a href="mailto:customport@origene.com">customport@origene.com</a> 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 gape

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: <u>NP 000446</u>

RefSeq Size: 168 bp RefSeq ORF: 1302 bp



#### LKB1 (STK11) (NM\_000455) Human Mutant ORF Clone - RC402191

**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:** 6.2 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]