

## Product datasheet for **RC400273**

### **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:	P281L
Affected Codon#:	281
Affected NT#:	c.842
Nucleotide Mutation:	STK11 Mutant (P281L), Myc-DDK-tagged ORF clone of Homo sapiens serine/threonine kinase 11 (STK11) as transfection-ready DNA
Effect:	Missense
Symbol:	LKB1
Synonyms:	hLKB1; LKB1; PJS
E. coli Selection:	Kanamycin (25 ug/mL)
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
Tag:	Myc-DDK
ACCN:	NM_000455
ORF Size:	1299 bp
Restriction Sites:	Sgfl-MluI


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**ORF Nucleotide Sequence:**

>RC400273 representing NM\_000455  
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCC**CGATCGC**

ATGGAGGTGGTGGACCCGACGAGCTGGGCATGTTACGGAGGGCGAGCTGATGTCGGTGGGTATGGACA  
 CGTTCATCCACCGCATCGACTCCACCGAGGTCACTACCAGCCGCGCCGAAGCGGGCCAAGCTCATCGG  
 CAAGTACCTGATGGGGGACCTGCTGGGGGAAGGCTCTTACGGCAAGGTGAAGGAGGTGCTGGACTCGGAG  
 ACGCTGTGCAGGAGGGCCGTCAGATCTCAAGAAGAAGAAGTTGCGAAGGATCCCCAACGGGGAGGCCA  
 ACGTGAAGAAGGAAATCAACTACTGAGGAGGTACGGCAGAAAAATGTCATCCAGCTGGTGGATGTGTT  
 ATACAACGAAGAGAAGCAGAAAAATGTATATGGTATGGAGTACTGCGTGTGTGGCATGCAGGAAATGCTG  
 GACAGCGTGCCGAGAAGCGTTTCCAGTGTGCCAGGCCACGGGTACTTCTGTCAGCTGATTGACGGCC  
 TGGAGTACCTGCATAGCCAGGGCATTGTGCACAAGGACATCAAGCCGGGGAACCTGCTGCTCACCACCGG  
 TGGCACCTCAAATCTCCGACCTGGGCGTGGCCGAGGCACTGCACCCGTTTCGCGCGGACGACACCTGC  
 CGGACCAAGCAGGGCTCCCCGGCTTCCAGCCGCCGAGATTGCCAACGGCCTGGACACCTTCTCCGGCT  
 TCAAGGTGGACATCTGGTCGGCTGGGGTCACCTCTACAACATCACCACGGGTCTGTACCCCTTCGAAGG  
 GGACAACATCTACAAGTTGTTTGAGAACATCGGGAAGGGGAGCTACGCCATCCCGGGCGACTGTGGCCCC  
 CTGCTCTCTGACCTGCTGAAAGGGATGCTTGAGTACGAACCGGCCAAGAGGTTCTCCATCCGGCAGATCC  
 GGCAGCACAGCTGGTTCCGGAAGAAACATCCTCCGGCTGAAGCACCAGTGCCCATCCACCGAGCCGAGA  
 CACCAAGGACCGGTGGCGCAGCATGACTGTGGTGCCGTAAGTGGAGGACCTGCACGGCGCGGACGAGGAC  
 GAGGACCTCTTCGACATCGAGGATGACATCATCTACACTCAGGACTTCACGGTGCCCGGACAGGTCCAG  
 AAGAGGAGGCCAGTACAATGGACAGCGCCGGGGCCTCCCCAAGGCCGTGTGTATGAACGGCACAGAGGC  
 GGCGCAGCTGAGCAGCAATCCAGGGCGGAGGGCCGGGCCCCAACCTGCCCGCAAGGCCTGCTCCGCC  
 AGCAGCAAGATCCGCCGCTGTCGGCCTGCAAGCAGCAG

**ACGCGT**ACGCGGCGGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCTGGATT  
 ACAAGGATGACGACGATAAGGTTTAA

**Protein Sequence:**

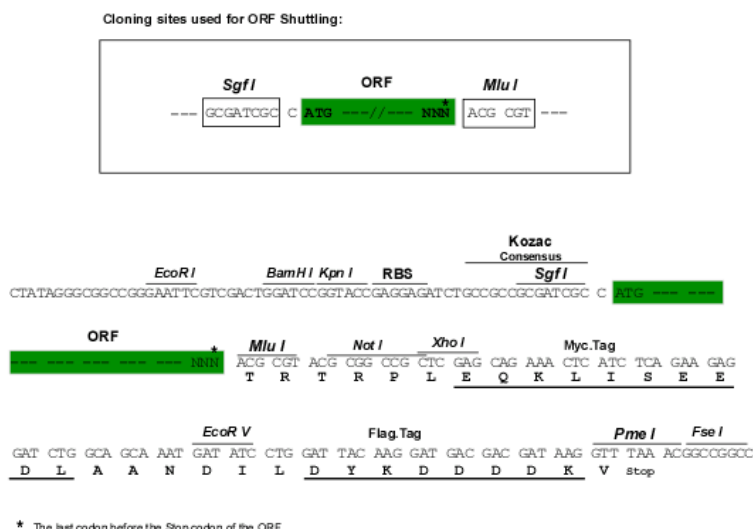
>RC400273 representing NM\_000455  
 Red=Cloning site Green=Tags(s)

MEVVDPPQLGMFTEGELMSVGMDFIHRIDSTEVYQPRRKRAKLIGKYLMDLLGEGSYGKVKEVLDSE  
 TLCRRAYKILKKKLRIPNGEANKKEIQLLRRLRHKNVIQLVDVLYNEEKQKMYMMEYCVCGMQEML  
 DSVPEKRFPVCQAHGYFCQLIDGLEYLHSQIVHKDIKPGNLLTTGGTLKISDLGVAEALHPFAADDT  
 RTSQGSAPAFQPEIANGLDTFSGFKVDIWSAGVTLYNITTGLYPFEGDNIYKLFENIGKGSYAIPGDCGP  
 LLSDLLKGMLEYEPAKRFSIRQIRQHSWFRKKHPPAEAPVPIPPSPDTKDRWRSMTVVPYLEDLHGADE  
 EDLFDIEDDIIYTQDFTVPGQVPEEEASHNGQRRGLPKAVCMNGTEAAQLSTKSRAEGRAPNPARKACSA  
 SSKIRRLSACKQQ

**TR**TRPLE**QKL**ISEEDLAANDILDYKDDDDKV

**Restriction Sites:**

Sgfl-MluI

**Cloning Scheme:**

**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](mailto: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

Protein Families:	Druggable Genome, Protein Kinase
Protein Pathways:	Adipocytokine signaling pathway, mTOR signaling pathway
MW:	48 kDa
Gene Summary:	<p>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]</p>