

Product datasheet for **RC402215**

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: | D162N |
| Affected Codon#: | 162 |
| Affected NT#: | 484 |
| Nucleotide Mutation: | STK11 Mutant (D162N), 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 Selection: | Neomycin |
| Vector: | pCMV6-Entry (PS100001) |
| Tag: | Myc-DDK |
| ACCN: | NM_000455 |
| ORF Size: | 1299 bp |
| Restriction Sites: | Sgfi-Mlul |



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ORF Nucleotide Sequence:

>RC402215 representing NM_000455
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGATCGCC**

ATGGAGGTGGTGGACCCGACGAGCTGGGCATGTTACGGAGGGCGAGCTGATGTCGGTGGGTATGGACA
 CGTTCATCCACCGCATCGACTCCACCGAGGTCACTACCAGCCGCGCCGAAGCGGGCCAAGCTCATCGG
 CAAGTACCTGATGGGGGACCTGCTGGGGGAAGGCTCTTACGGCAAGGTGAAGGAGGTGCTGGACTCGGAG
 ACGCTGTGCAGGAGGGCCGCAAGATCCTCAAGAAGAAGAAGTTGCGAAGGATCCCCAACGGGGAGGCCA
 ACGTGAAGAAGGAAATCAACTACTGAGGAGGTTACGGCACAAAAATGTCATCCAGCTGGTGGATGTGTT
 ATACAACGAAGAGAAGCAGAAAATGTATATGGTGTGGAGTACTGCGTGTGTGGCATGCAGGAAATGCTG
 GACAGCGTGCCGGAAGCGTTCCAGTGTGCCAGGCCACGGGTACTTCTGTCAGTGATTAACGGCC
 TGGAGTACCTGCATAGCCAGGGCATTGTGCACAAGGACATCAAGCCGGGGAACCTGCTGCTCACCACGG
 TGGCACCTCAAATCTCGACCTGGGCGTGGCCGAGGCACTGCACCCGTTTCGGCGGGACGACACCTGC
 CGGACCAGCCAGGGCTCCCCGGCTTCCAGCCGCCGAGATTGCCAACGGCTGGACACCTTCTCCGGCT
 TCAAGGTGGACATCTGGTCCGGTGGGGTCAACCTCTACAACATCACACGGGTCTGTACCCCTTCGAAGG
 GGACAACATCTACAAGTTGTTTGAACATCGGGAAGGGGAGCTACGCCATCCCGGGCGACTGTGGCCCC
 CCGCTCTCTGACTGCTGAAAGGGATGCTTGAGTACGAACCGCCAAGAGGTTCTCCATCCGGCAGATCC
 GGCAGCACAGCTGGTCCGGAAGAAACATCCTCCGGCTGAAGCACCAGTGCCATCCCACCGAGCCGAGA
 CACCAAGGACCGGTGGCGCAGCATGACTGTGGTGGCGTACTTGGAGGACCTGCACGGCGGGACGAGGAC
 GAGGACCTCTTCGACATCGAGGATGACATCATCTACACTCAGGACTTACGGTGGCCGGACAGGTCACG
 AAGAGGAGGCCAGTCACAATGGACAGCGCCGGGCTCCCCAAGGCCGTGTGTATGAACGGCACAGAGGC
 GGCGCAGCTGAGCACAAATCCAGGGCGAGGGCCGGGCCCCCAACCTGCCCGCAAGGCCTGCTCCGCC
 AGCAGCAAGATCCGCCGGCTGTCGGCTGCAAGCAGCAG

AG**CGGACCG**ACGCGTACGCGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCC
 TGGATTACAAGGATGACGACGA TAAGGTTTAA

Protein Sequence:

>RC402215 representing NM_000455
 Red=Cloning site Green=Tags(s)

MEVVDPPQLGMFTEGELMSVGMDFIHRIDSTEVIYQPRRKRAKLIGKYLMDLLGEGSYGKVKVLDSE
 TLCRRAVKILKKKLRIPNGEANVKKEIQLLRRLRHKNVIQLVDVLYNEEKQKMYMMEYCVCGMQEML
 DSVPEKRFVPCQAHGYFCQLINGLEYLHSQIVHKDIKPNLLTTGGTLKISDLGVAEALHPFAADDTC
 RTSQGSAPAFQPPEIANGLDTFSGFKVDIWSAGVTLYNITGLYPFEGDNIYKLFENIGKGSYAIPGDCGP
 PLSDLLKGMLEYEPAKRFSIRQIRQHSWFRKKHPPAEAPVPIPPSPDTKDRWRSMTVVPYLEDLHGADED
 EDLFDIEDDIIYTQDFVPGQVPEEEASHNGQRRGLPKAVCMNGTEAAQLSTKSRAEGRAPNPARKACSA
 SSKIRRLSACKQQ

SGP**TRTRRLEQKLI**SEEDLAANDILDYKDDDDKV

Restriction Sites:

SgfI-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 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).

RefSeq:

[NP_000446](#)

RefSeq Size:

1299 bp

RefSeq ORF:

1302 bp

Locus ID:

6794

Cytogenetics:

19p13.3

Domains:

pkinese, TyrKc, S_TKc

Protein Families:

Druggable Genome, Protein Kinase

Protein Pathways:

Adipocytokine signaling pathway, mTOR signaling pathway

MW: 47.6 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]