

Product datasheet for **RC202885**

LKB1 (STK11) (NM_000455) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	LKB1 (STK11) (NM_000455) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	LKB1
Synonyms:	hLKB1; LKB1; PJS
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



[View online »](#)

ORF Nucleotide Sequence:

>RC202885 representing NM_000455
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGGATCGCC**

ATGGAGGTGGTGGACCCGCAGCAGCTGGGCATGTTACGGAGGGCGAGCTGATGTCGGTGGGTATGGACA
 CGTTCATCCACCGCATCGACTCCACCGAGGTACTCTACCAGCCGCGCCGAAGCGGGCCAAGCTCATCGG
 CAAGTACCTGATGGGGGACCTGCTGGGGGAAGGCTCTTACGGCAAGGTGAAGGAGGTGCTGGACTCGGAG
 ACGCTGTGCAGGAGGGCCGTCAGATCCTCAAGAAGAAGAAGTTGCAAGGATCCCCAACGGGGAGGCCA
 ACGTGAAGAAGGAAATCAACTACTGAGGAGGTTACGGCACAAAAATGTCATCCAGCTGGTGGATGTGTT
 ATACAACGAAGAGAAGCAGAAAAATGATATGGTGTGAGTACTGCGTGTGTGGCATGCAGGAAATGCTG
 GACAGCGTGCCGAGAAGCGTTTCCAGTGTGCCAGGCCACGGTACTTCTGTGAGCTGATTGACGGCC
 TGGAGTACCTGCATAGCCAGGCGATTGTGCACAAGGACATCAAGCCGGGAACCTGCTGCTACCACCGG
 TGGCACCTCAAATCTCCGACCTGGGCGTGGCCGAGGCACTGCACCCGTTTCGCGCGGACGACACCTGC
 CGGACCAGCCAGGGCTCCCGGCTTCCAGCCGCCGAGATTGCCAACGGCTGGACACCTTCTCCGGCT
 TCAAGGTGGACATCTGGTCCGGCTGGGGTCAACCTCTACAACATCACCCAGGGTCTGTACCCCTTCGAAGG
 GGACAACATCTACAAGTTGTTTGAACATCGGGAAGGGGAGCTACGCCATCCCGGGCGACTGTGGCCCC
 CCGCTCTCTGACCTGCTGAAAGGGATGCTTGAGTACGAACCGGCCAAGAGGTTCTCCATCCGGCAGATCC
 GGCAGCACAGCTGGTCCGGAAGAAACATCCTCCGGCTGAAGCACCAGTCCCATCCACCGAGCCGAGA
 CACCAAGGACCGGTGGCGCAGCATGACTGTGGTGCCGACTTGGAGGACCTGCACGGCGCGGACGAGGAC
 GAGGACCTCTCGACATCGAGGATGACATCATCTACACTCAGGACTTCACGGTCCCGGACAGGTCCCAG
 AAGAGGAGGCCAGTCACAATGGACAGCGCCGGGCCTCCCCAAGGCCGTGTGTATGAACGGCACAGAGGC
 GGCGCAGCTGAGCACAAATCCAGGGCGGAGGGCCGGGCCCCCAACCCTGCCCGCAAGGCCTGCTCCGCC
 AGCAGCAAGATCCGCGGCTGTCCGCTGCAAGCAGCAG

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence:

>RC202885 representing NM_000455
 Red=Cloning site Green=Tags(s)

MEVVDPQQLGMFTEGELMSVGMDFIHRIDSTEVYQPRRKRAKLIGKYLMDLLGEGSYGKVKVLDSE
 TLCRRAVKILKKKLRIPNGEANVKKEIQLLRRLRHKNVQLVDVLYNEEKQKMYMMEYCVGMQEML
 DSVPEKRFPPVCQAHGYFCQLIDGLEYLHSQIVHKDIKPGNLLLTTGGTLKISDLGVAEALHPFAADDT
 RTSQGSFAFPPEIANGLDTFSGFKVDIWSAGVTLYNIITGLYPFEGDNIYKLFENIGKGSYAIPGDCGP
 PLSDLLKGMLEYEPAKRFSIRQIRQHSWFRKKHPPAEAPVPIPPSPDTKDRWRSMTVVPYLEDLHGADED
 EDLFDIEDDIYTDFTVPGQVPEEEASHNGQRRGLPKAVCMNGTEAAQLSTKSRAEGRAPNPARKACSA
 SSKIRRLSACKQQ

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms:

https://cdn.origene.com/chromatograms/mg2913_f02.zip

Restriction Sites:

SgfI-MluI

Cloning Scheme:


ACCN: NM_000455

ORF Size: 1299 bp

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).

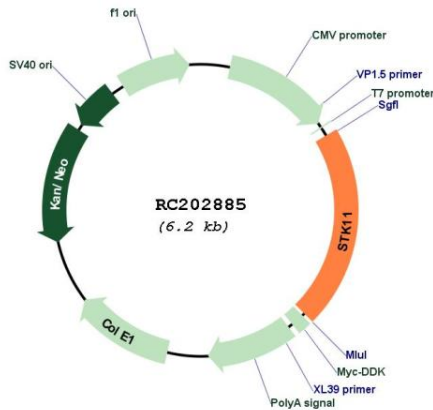
- Reconstitution Method:**
1. Centrifuge at 5,000xg for 5min.
 2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.
 3. Close the tube and incubate for 10 minutes at room temperature.
 4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom.
 5. Store the suspended plasmid at -20°C. The DNA is stable for at least one year from date of shipping when stored at -20°C.

RefSeq: [NM_000455.5](#)

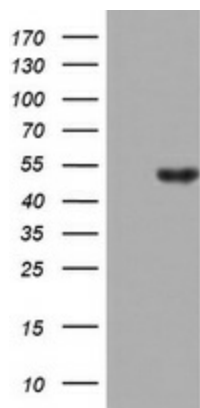
RefSeq Size: 3286 bp
RefSeq ORF: 1302 bp
Locus ID: 6794
UniProt ID: [Q15831](#)
Cytogenetics: 19p13.3
Domains: pkinase, TyrKc, S_TKc
Protein Families: Druggable Genome, Protein Kinase
Protein Pathways: Adipocytokine signaling pathway, mTOR signaling pathway
MW: 48.5 kDa

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]

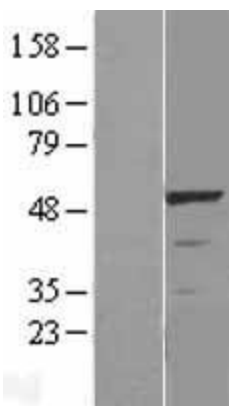
Product images:



Circular map for RC202885



HEK293T cells were transfected with the pCMV6-ENTRY control (Cat# [PS100001], Left lane) or pCMV6-ENTRY STK11 (Cat# RC202885, Right lane) cDNA for 48 hrs and lysed. Equivalent amounts of cell lysates (5 ug per lane) were separated by SDS-PAGE and immunoblotted with anti-STK11 (Cat# [TA802554]). Positive lysates [LY424705] (100ug) and [LC424705] (20ug) can be purchased separately from OriGene.



Western blot validation of overexpression lysate (Cat# [LY424705]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC202885 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).