

Product datasheet for **KN202885**

LKB1 (STK11) Human Gene Knockout Kit (CRISPR)

Product data:

Product Type:	Knockout Kits (CRISPR)
Format:	2 gRNA vectors, 1 GFP-puro donor, 1 scramble control
Donor DNA:	GFP-puro
Symbol:	LKB1
Locus ID:	6794
Components:	KN202885G1 , LKB1 gRNA vector 1 in pCas-Guide CRISPR vector (GE100002), Target Sequence: CCACCGCATCGACTCCACCG KN202885G2 , LKB1 gRNA vector 2 in pCas-Guide CRISPR vector (GE100002), Target Sequence: GAGGGCGAGCTGATGTCGGT KN202885D , donor DNA containing left and right homologous arms and GFP-puro functional cassette.

Homologous arm and GFP-puro sequences:

pUC vector backbone in gray; **Left arm sequence in blue**; **GFP-puro in green**; **Right arm in violet**

```

AAGGCGAGTT ACATGATCCC CCATGTTGTG CAAAAAAGCG GTTAGCTCCT TCGGTCCTCC GATCGTTGTC
AGAAGTAAGT TGGCCGAGT GTTATCACTC ATGGTTATGG CAGCACTGCA TAATTCTCTT ACTGTCATGC
CATCCGTAAG ATGCTTTTCT GTGACTGGTG AGTACTCAAC CAAGTCATTG TGAGAATAGT GTATGCGGGC
ACCGAGTTGC TCTTGCCCGG CGTCAATACG GGATAATACC GCGCCACATA GCAGAATTTT AAAAGTGCTC
ATCATTGGAA AACGTTCTTC GGGGCGAAAA CTCTCAAGGA TCTTACCCTG GTTGAGATCC AGTTTCGATGT
AACCCACTCG TGCACCCAAC TGATCTTCAG CATCTTTTAC TTTACCAGC GTTTCTGGGT GAGCAAAAAC
AGGAAGGCAA AATGCCGCAA AAAAGGGAAT AAGGGCGACA CGGAAATGTT GAATACTCAT ACTCTTCCTT
TTTCAATATT ATTGAAGCAT TTATCAGGGT TATTGTCTCA TGAGCGGATA CATATTTGAA TGTATTTAGA
AAAATAAACA AATAGGGGTT CCGCGCACAT TTCCCGGAAA AGTGCCACCT GACGTCTAAG AAACCATTAT
TATCATGACA TTAACCTATA AAAATAGGCG TATCACGAGG CCCTTTCGGG TCGCGGTTT CGGTGATGAC
GGTAAAACC TCTGACACAT GCAGCTCCCG TTGACGGTCA CAGCTTGCT GTAAAGCGAT GCCGGGAGCA
GACAAGCCCG TCAGGGCGCG TCAGCGGGTG TTGGCGGGTG TCGGGGCTGG CTTAACTATG CGGCATCAGA
GCAGATTGTA CTGAGAGTGC ACCATAAAAT TGTAACGTT AATATTTTGT TAAAATTCGC GTTAAATTTT
TGTTAAATCA GCTCATTTTT TAACCAATAG GCCGAAATCG GCAAAATCCC TTATAATCA AAAGAATAGC
CCGAGATAGG GTTGAGTGTT GTTCCAGTTT GGAACAAGAG TCCACTATTA AAGAACGTGG ACTCCAACGT
CAAAGGGCGA AAAACCGTCT ATCAGGGCGA TGGCCCACTA CGTGAACCAT CACCAAATC AAGTTTTTTG
GGGTGAGGT GCCGTAAAGC ACTAAATCGG AACCCCTAAG GGAGCCCCCG ATTTAGAGCT TGACGGGGAA
AGCCGGCGAA CGTGCGGAGA AAGGAAGGGA AGAAAGCGAA AGGAGCGGGC GCTAGGGCGC TGGCAAGTGT
AGCGGTACAG CTGCGCGTAA CCACCACACC CGCCGCGCTT AATGCGCCGC TACAGGGCGC GACTATGGT
TGCTTTGACG TATGCGGTGT GAAATACCGC ACAGATCGCT AAGGAGAAAA TACCGCATCA GGCGCCATTC
GCCATTCAGG CTGCGCAACT GTTGGGAAGG GCGATCGGTG CGGGCCTCTT CGTATTACG CCAGCTGGCG
AAAGGGGAT GTGCTGCAAG GCGATTAAGT TGGTAACGC CAGGGTTTTC CCAGTACGA CGTTGTAATA
CGACGGCCAG TGAATTGGAG GCTACAGTCA GTGGAGAGGA CTTTCACTGA CTGACTGACT GGGTCTCAAC

```



[View online »](#)

CTCGGCGCCC CCCGGGAGGT CCGCTCGGTC GTCCGCGGCG GAGCGTTTGC TCCTGGGACA GGCGGTGGGA
 CCGGGGCGTC GCCGGAGACG CCCCAGCGA AGTTGGGCTC TCCAGGTGTG GGGGTCCCGG GGGGTAGCGA
 CGTCGCGGAC CCGGCCTGTG GGATGGGCGG CCCGGAGAAG ACTGCGCTCG GCCGTGTTCA TACTTGTCCG
 TGGGCTGAG GTCCCCGGAG GATGACCTAG CACTGAAAAG CCCCGGCCGG CCTCCCAGG GTCCCCGAGG
 ACGAAGTTGA CCCTGACCGG GCCGTCTCCC AGTTCTGAGG CCCGGTCCC ACTGGAATC GCGTCTGAGC
 CGCCGTCCCG GACCCCGGT GCCCGCCGGT CCGCAGACCC TGCACCGGGC TTGGACTCGC AGCCGGGACT
 GAGCTGTAGA ACAATCGTTT CTGTTGGAAG AAGGGTTTTT CCCTTCCTTT TGGGTTTTTT GTTGCCTTTT
 TTTTTTCTTT TTTCTTTGTA AAATTTTGGG GAAGGGAAGT CGGAACACAA GGAAGGACCG CTCACCCGCG
 GACTCAGGGC TGCGGCGGGG ACTCCAGGAC CCTGGGTCCA GCACTAGCAT GGAGAGCGAC GAGAGCGGCC
 TGCCCGCCAT GGAGATCGAG TGCCGCATCA CCGGCACCCT GAACGGCGTG GAGTTCGAGC TGGTGGGCGG
 CGGAGAGGGC ACCCCGAGC AGGGCCGCAT GACCAACAAG ATGAAGAGCA CCAAAGGCGC CCTGACCTTC
 AGCCCTACC TGCTGAGCCA CGTGATGGG CACGCTTCT ACCACTTCGG CACCTACCCC AGCGGTACG
 AGAACCCCTT CCTGCACGCC ATCAACAACG GCGGCTACAC CAACACCCGC ATCGAGAAGT ACGAGGACGG
 CGCGGTGCTG CACGTGAGCT TCAGCTACCG CTACGAGGCC GGCCGCGTGA TCGGCGACTT CAAGGTGATG
 GGCACCGGCT TCCCGAGGA CAGCGTGATC TTCACCGACA AGATCATCCG CAGCAACGCC ACCGTGGAGC
 ACCTGCACCC CATGGGCGAT AACGATCTGG ATGGCAGCTT CACCCGACC TTCAGCCTGC GCGACGCGG
 CTACTACAGC TCCGTGGTGG ACAGCCACAT GCACTTCAAG AGCGCCATCC ACCCCAGCAT CCTGCAGAAC
 GGGGGCCCA TGTTGCGCTT CCGCCGCGTG GAGGAGGATC ACAGCAACAC CGAGCTGGG ATCGTGGAGT
 ACCAGCACGC TTCAAGACC CCGGATGCAG ATGCCGGTGA AGAAAGAGT TAAGAATTCC GATCATATTC
 AATAACCTT AATATAACTT CGTATAATGT ATGCTATACG AAGTTATTAG GTCTGAAGAG GAGTTTACGT
 CCAGCCAAGC TTAGGATCTC GACCTCGAAA TTCTACCGGG TAGGGGAGG GCTTTTCCCA AGGCAGTCTG
 GAGCATGCGC TTTAGCAGCC CCGCTGGCAC TTGGCGCTAC ACAAGTGGCC TCTGGCTCG CACACATTCC
 ACATCCACCG GTAGCGCAA CCGCTCCGT TCTTTGGTGG CCCCTTCGG CCACCTTCTA CTCTCCCTT
 AGTCAGGAAG TTCCCCCGG CCCCAGACT CCGCTCGTGC AGGACGTGAC AAATGGAAGT AGCACGTCTC
 ACTAGTCTCG TGCAATGGA CAGCACCGCT GAGCAATGGA AGCGGGTAGG CCTTTGGGGC AGCGCCAAT
 AGCAGCTTTG CTCCTTCGCT TTCTGGGCTC AGCAGCTGGG AAGGGTGGT CCGGGGCGG GCTCAGGGG
 GGGCTCAGGG GCGGGGCGGG CGCCGAAGG TCCTCCGGAG GCCCGGCATT CTGCACGCTT CAAAAGCGCA
 CGTCTGCCG GCTGTTCTCC TCTTCTCAT CTCCGGCCT TTCGACCTGC ATCCATCTAG ATCTCGAGCA
 GCTGAAGCTT ACCATGACCG AGTACAAGCC CACGGTGGC CTGCCACCC GCGACGACTT CCCCAGGGC
 GTACGCACCC TCGCCGCGC GTTCGCCGAC TACCCGCCA CGCGCCACAC CGTCGATCCG GACCGCCACA
 TCGAGCGGT CACCGAGCTG CAAGAACTCT TCCTCACGG CGTCGGGCTC GACATCGGA AGGTGTGGT
 CGCGGACGAC GCGCGCGCGG TGCGGTCTG GACCACGCG GAGAGCGTCG AAGCGGGGGC GGTGTTCCG
 GAGATCGGCC CGCGCATGGC CGAGTTGAGC GGTTCGCCG TGGCCGCGCA GCAACAGATG GAAGGCCTCC
 TGGCGCCGA CCGGCCAAG GAGCCCGCT GGTTCCTGGC CACCGTCGGC GTCTCGCCC ACCACCAGG
 CAAGGGTCTG GGCAGCGCG TCGTGCTCCC CGGAGTGGAG GCGGCCGAGC GCGCCGGGT GCCCGCTTC
 CTGGAGACCT CCGCGCCCA CAACCTCCCC TTCTACGAGC GGCTCGGCTT CACCGTACC GCCGACTCG
 AGGTGCCCGA AGGACCGCGC ACCTGGTGA TGACCCGCA GCCCGGTGCC TGACGCCCG CCCACGACC
 GCAGCGCCG ACCGAAAGGA GCGCACGACC CCATGCATCG ATGATATCAG ATCCCGGGA TGCAGAAAT
 GATGATCTAT TAAACAATA AGATGTCCAC TAAAATGGAA GTTTTCTG TCATACTTTG TTAAGAAGGG
 TGAGAACAGA GTACCTACAT TTTGAATGGA AGGATTGGAG CTACGGGGT GGGGGTGGG TGGATTAGA
 TAAATGCCTG CTCTTACTG AAGGCTCTT ACTATTGCTT TATGATAATG TTTTATAGT GGATATCATA
 ATTTAAACAA GCAAAACCA ATTAAGGGC AGCTATTCC TCCACTCAT GATCTATAGA TCTATAGATC
 TCTCGTGGGA TCATTGTTTT TCTTTGATT CCCACTTTGT GGTCTAAGT ACTGTGGTTT CCAAATGTGT
 CAGTTTCTA GCCTGAAGAA CGAGATCAGC AGCCTCTGTT CCACATACAC TTCATTCTA GTATTGTTTT
 GCCAAGTTCT AATTCCATCA GAAGCTGGTC GAGATCCGGA ACCCTAATA TAACTTCGA TAATGTATGC
 TATACGAAGT TATTAGTCC CTCGAAGAGG TTCACTAGG GCGCCTCTAC CAGCCGCGCC GCAAGCGGGC
 CAAGCTCATC GGCAAGTACC TGATGGGGGA CCTGCTGGG GAAGGCTCTT ACGGCAAGT GAAGGAGGTG
 CTGGACTCGG AGACGCTGTG CAGGAGGGCC GTCAAGATCC TCAAGAAGAA GAAGTTGCGA AGGATCCCA
 ACGGGGAGG CAACGTGAAG AAGTAAGTAT GGCTTGCTGG GGTCGGGGC GGGCCGGCC AGTCACGGTG
 CTGATGGTTC TGTCTTCTT CTTTCTCTC TCCCTCCCTC CCTTACTTCC TCTTAACACC CTGAGCTGGA
 CCCGTCTGGC GCCTGTGTCC TCCGTGCCAG GGAGAGCGTG GTTGGGGCC TCGTACCG ACTTTCACTC
 AGGCAAGGCC AGTTGTCGA GCGGGGCGTG CGTTGCATG GGCTCTTGA CTCCAGTTAA AATGCCTGG

TAGCGAAACC CTCCTGAGAA GGGAGCGGCC CCCAATCCCC TAAGACTAGC CCCTTGCTC CCCAGCTGT
 CCAAGGAGCA GAGGCGCCCA GTGGAATCAG CCTGTGTTTG TTTGGGCCCC GAGAGTTTGT GTGCGGCCGC
 CAACACGTTT TCTGCAGCAA GAGACCACTG ACTGACTGAC TGGAAAGAGG AAGGGCTGGA AGAGGAAGGA
 GCTTGGCGTA ATCATGGTCA TAGCTGTTTC CTGTGTGAAA TTGTTATCCG CTCACAATTC CACACAACAT
 ACGAGCCGGA AGCATAAAGT GTAAAGCCTG GGGTGCCTAA TGAGTGAGCT AACTCACATT AATTGCGTTG
 CGTCACTGC CCGCTTTCCA GTCGGGAAAC CTGTCTGACC AGCTGCATTA ATGAATCGGC CAACGCGCGG
 GGAGAGGCGG TTTGCGTATT GGGCGCTCTT CCGCTTCCTC GCTCACTGAC TCGCTGCGCT CGGTCTGTTG
 GCTGCGGCGA GCGGTATCAG CCACTCAAA GCGGTAATA CGGTTATCCA CAGAATCAGG GGATAACGCA
 GGAAGAACA TGTGAGCAA AGGCCAGCAA AAGGCCAGGA ACCGTAAAAA GGCCGCGTTG CTGGCGTTTT
 TCCATAGGCT CCGCCCCCT GACGAGCATC ACAAAAATCG ACGCTCAAGT CAGAGGTGGC GAAACCCGAC
 AGGACTATAA AGATACCAGG CGTTTCCCC TGGAAAGCTC CTCGTGCGCT CTCCTGTTCC GACCCTGCCG
 CTTACCGGAT ACCTGTCCGC CTTTCTCCCT TCGGGAAGCG TGGCGCTTTC TCATAGCTCA CGCTGTAGGT
 ATCTCAGTTC GGTGTAGGTC GTTCGCTCCA AGCTGGGCTG TGTGCACGAA CCCCCGTTT AGCCCGACCG
 CTGCGCCTTA TCCGTAATC ATCGTCTTGA GTCCAACCCG GTAAGACACG ACTTATCGCC ACTGGCAGCA
 GCCACTGGTA ACAGGATTAG CAGAGCGAGG TATGTAGCGG GTGCTACAGA GTTCTTGAAG TGGTGGCCTA
 ACTACGGCTA CACTAGAAGA ACAGTATTG GTATCTGCGC TCTGCTGAAG CCAGTTACCT TCGGAAAAAG
 AGTTGGTAGC TCTTGATCCG GCAACAAC CACCGCTGGT AGCGGTGGTT TTTTGTGTTG CAAGCAGCAG
 ATTACGCGCA GAAAAAAGG ATCTCAAGAA GATCCTTTGA TCTTTTCTAC GGGGTCTGAC GCTCAGTGGA
 ACGAAAATC ACGTTAAGG ATTTTGGTCA TGAGATTATC AAAAAGGATC TTCACCTAGA TCCTTTTAAA
 TAAAAATGA AGTTTTAAAT CAATCTAAG TATATATGAG TAAACTGGT CTGACAGTTA CCAATGCTTA
 ATCAGTGAGG CACCTATCTC AGCGATCTGT CTATTTGCTT CATCCATAGT TGCCTGACTC CCCGTCTGT
 AGATAACTAC GATACGGGAG GGCTTACCAT CTGGCCCCAG TGCTGCAATG ATACCGCGAG AACCACGCTC
 ACCGGCTCCA GATTTATCAG CAATAAACCA GCCAGCCGGA AGGGCCGAGC GCAGAAGTGG TCCTGCAACT
 TTATCCGCCCT CCATCCAGTC TATTAATTGT TGCCGGGAAG CTAGAGTAAG TAGTTCGCCA GTTAATAGTT
 TGCGCAACGT TGTGCCATT GCTACAGGCA TCGTGGTGTC ACGCTCGTCG TTTGGTATGG CTTTCATTACG
 CTCCGTTCC CAACGATC

GE100003, scramble sequence in pCas-Guide vector

Disclaimer:

These products are manufactured and supplied by OriGene under license from ERS. The kit is designed based on the best knowledge of CRISPR technology. The system has been functionally validated for knocking-in the cassette downstream the native promoter. The efficiency of the knock-out varies due to the nature of the biology and the complexity of the experimental process.

RefSeq:

[NM_000455](#)

UniProt ID:

[Q15831](#)

Synonyms:

hLKB1; LKB1; PJS

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:

