

Product datasheet for **KN207356**

LC3B (MAP1LC3B) 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: LC3B
Locus ID: 81631
Components: **KN207356G1**, LC3B gRNA vector 1 in pCas-Guide CRISPR vector (GE100002), Target Sequence: GGTGAGTGTCGCCGCGAGGG
KN207356G2, LC3B gRNA vector 2 in pCas-Guide CRISPR vector (GE100002), Target Sequence: TTCAAGCAGCGCCGCACCTT
KN207356D, 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**

```
GATCGTTGGG AACCGGAGCT GAATGAAGCC ATACCAAACG ACGAGCGTGA CACCACGATG CCTGTAGCAA
TGGCAACAAC GTTGCACAAA CTATTAACCTG GCGAACTACT TACTCTAGCT TCCCAGCAAC AATTAATAGA
CTGGATGGAG GCGGATAAAG TTGCAGGACC ACTTCTGCGC TCGGCCCTTC CGGCTGGCTG GTTTATTGCT
GATAAATCTG GAGCCGGTGA GCGTGGTTCT CGCGGTATCA TTGCAGCACT GGGGCCAGAT GGTAAGCCCT
CCCGTATCGT AGTTATCTAC ACGACGGGGA GTCAGGCAAC TATGGATGAA CGAAATAGAC AGATCGCTGA
GATAGGTGCC TCACTGATTA AGCATTGGTA ACTGTACAGC CAAGTTTACT CATATATACT TTAGATTGAT
TTAAAACCTC ATTTTAAATT TAAAAGGATC TAGGTGAAGA TCCTTTTTGA TAATCTCATG ACCAAAATCC
CTTAACGTGA GTTTTCGTTC CACTGAGCGT CAGACCCCGT AGAAAAGATC AAAGGATCTT CTTGAGATCC
TTTTTTCTG CGCGTAATCT GCTGCTTGCA AACAAAAAAA CCACCGCTAC CAGCGGTGGT TTGTTTGCCG
GATCAAGAGC TACCAACTCT TTTTCCGAAG GTAAGTGGCT TCAGCAGAGC GCAGATACCA AATACTGTTC
TTCTAGTGTA GCCGTAGTTA GGCCACCACT TCAAGAAGCTC TGTAGCACCG CCTACATACC TCGCTCTGCT
AATCCTGTTA CCAGTGGCTG CTGCCAGTGG CGATAAGTCG TGTCTTACCG GGTGGACTC AAGACGATAG
TTACCGGATA AGGCGCAGCG GTCGGGCTGA ACGGGGGGTT CGTGACACACA GCCCAGCTTG GAGCGAACGA
CCTACACCGA ACTGAGATAC CTACAGCGTG AGCTATGAGA AAGCGCCACG CTTCCGGAAG GGAGAAAGGC
GGACAGGTAT CCGGTAAGCG GCAGGGTCCG AACAGGAGAG CGCACGAGGG AGCTTCCAGG GGGAAACGCC
TGGTATCTTT ATAGTCCTGT CGGGTTTCGC CACCTCTGAC TTGAGCGTCG ATTTTGTGTA TGCTCGTCAG
GGGGGCGGAG CCTATGGAAA AACGCCAGCA ACGCGGCCTT TTTACGGTTC CTGGCCTTTT GCTGGCCTTT
TGCTCACATG TTCTTTCCTG CGTTATCCCC TGATTCTGTG GATAACCGTA TTACCGCCTT TGAGTGAGCT
GATACCGCTC GCCGCAGCCG AACGACCGAG CGCAGCGAGT CAGTGAGCGA GGAAGCGGAA GAGCGCCCAA
TACGCAAACC GCCTCTCCCC GCGCGTTGGC CGATTTCATTA ATGCAGCTGG CACGACAGGT TTCCCAGCTG
GAAAGCGGGC AGTGAGCGCA ACGCAATTA TGTGAGTTAG CTCACTCATT AGGCACCCCA GGCTTTACAC
TTTATGCTTC CGGCTCGTAT GTTGTGTGGA ATTGTGAGCG GATAACAATT TCACACAGGA AACAGCTATG
ACCATGATTA CGCCAAGCTC CTTCTCTTTC CAGCCCTTCC TCTTCTACTG ACTGACTGAC TGGAAGACAC
```



ACCTAGACGG CGCGGCCTGC CCTGCGCGCC TCAGCCCCGG GTGCCGCGCT CTCGGGCAGC ACCACCAAGT
 CTCTCTGGAG GGGAAAGGAT GGTTCGGATTT GCCCCATGTC CCTTCCTCTG ACCCCTCCCT CAAGAGTGCC
 CCGGGACACC CCGCCTGTGG CTCAGCCTCC CCCGCCCCGC GCTGCCATCT CCTCAGGGCC GGGCAGCAGG
 CTCGCCAGCG CCCACAGACC CCGGGTGC GG CAGCCAC AACCCTCACC TCAGGGGCT CAGGCGCCCA
 GCGGTGCTGG GCGGGGCTGG GGCACGACC GGAGCATGGC CAGAGCGCGC GTTTCGCCCA TCGCGCACGC
 GCACACACT GCTCCGCC CACGCTGCTG GCCGTGCTG GGTTCGCCCA CGCCCTCATT GGCGGCGCC
 CCGGCCGGCT CTGGCCCCG CCCTCGGTGA CGCTCGCGA GTCACCTGAC CAGCTGCGG GACTAGGAGA
 TACAAGGAA GTGGCTATCG CCAGAGTCGG ATTCGCCGCC GCAGCAGCCG CCGCCCCCGG GAGCCGCCGG
 GACCCTCGCG TCGTCGCCCG CGCCGCCGCC CAGATCCCTG CACCACTAGC ATGGAGAGCG ACGAGAGCGG
 CCTGCCCGCC ATGGAGATCG AGTGCCGCAT CACCGGCACC CTGAACGGCG TGGAGTTCGA GCTGGTGGG
 GCGGAGAGG GCACCCCGA GCAGGGCCGC ATGACCAACA AGATGAAGAG CACCAAAGG GCCCTGACCT
 TCAGCCCTA CTGCTGAGC CACGTGATGG GCTACGGCTT CTACCACTTC GGCACCTACC CCAGCGGCTA
 CGAGAACCC TTCCTGCACG CCATCAACAA CGGCGGCTAC ACCAACACCC GCATCGAGAA GTACGAGGAC
 GCGGCGTGC TGCACGTGAG CTTGAGCTAC CGCTACGAGG CCGGCCCGT GATCGGCGAC TTCAAGGTGA
 TGGGACCGG CTTCGCCGAG GACAGCGTGA TCTTACCGA CAAGATCATC CGCAGCAACG CCACCGTGG
 GCACCTGCAC CCCATGGGCG ATAACGATCT GGATGGCAGC TTCACCCGCA CCTTCAGCCT GCGCGACGGC
 GGCTACTACA GCTCCGTGGT GGACAGCCAC ATGCACTTCA AGAGCGCCAT CCACCCAGC ATCCTGCAGA
 ACGGGGGCC CATGTTCCGCC TTCGCCCGG TGGAGGAGGA TCACAGCAAC ACCGAGCTGG GCATCGTGG
 GTACCAGCAC GCCTTCAAGA CCCCGGATGC AGATGCCGTG GAAGAAAGAG TTTAAGAATT CCGATCATAT
 TCAATAACCC TTAATATAAC TTCGTATAAT GTATGCTATA CGAAGTTATT AGGTCTGAAG AGGAGTTTAC
 GTCCAGCAA GCTTAGGATC TCGACCTCGA AATTCTACCG GGTAGGGGAG GCGCTTTTCC CAAGGCAGTC
 TGGAGCATGC GCTTAGCAG CCCCGCTGG CACTTGGCGC TACACAAGTG GCCTCTGGC TCGCACACAT
 TCCACATCA CCGTAGGCG CCAACCGACT CGTTCCTTTG GTGGCCCTT CGGCCACCT TCTACTCTC
 CCCTAGTCAG GAAGTTCCCG CCCGCCCGC AGCTCGGTC GTGCAGGAC TGACAAATGG AAGTAGCACG
 TCTCACTAGT CTCGTGCAGA TGGACAGCAC CGCTGAGCAA TGGAAAGCGG TAGGCCTTTG GGGCAGCGG
 CAATAGCAGC TTTGCTCCTT CGCTTTCTGG GCTCAGAGG TGGGAAGGGG TGGTCCGGG GCGGGCTCA
 GGGGCGGGCT CAGGGGCGGG GCGGGCGCC GAAGTCTC CGGAGGCCG GCATTCTGCA CGCTTCAAAA
 GCGCAGTCT GCCGCGCTGT TCTCCTTTC CTCATCTCCG GGCTTTTGA CCTGCATCCA TCTAGATCTC
 GAGCAGTGA AGCTTACCAT GACCGAGTAC AAGCCCACGG TCGCCTCGC CACCCGCGAC GACGTCCCA
 GGGCCGTACG CACCCTCGCC GCCGCTTCC CCGACTACC CGCCACGCG CACACCGTCG ATCCGGACCG
 CCACATCGAG CGGGTCACCG AGCTGCAAGA ACTTCTCTC ACGCCGCTCG GGCTCGACAT CCGCAAGGTG
 TGGTTCGGG ACGACGGCGC CGCGGTGGCG GTCTGGACCA CGCCGGAGAG CGTCGAAGCG GGGCGGTGT
 TCGCCGAGAT CGGCCCGCG ATGGCCGAGT TGAGCGGTTT CCGGCTGGCC GCGCAGCAAC AGATGGAAGG
 CCTCTGGCG CGCACCGGC CCAAGGAGCC CGCGTGGTTC CTGGCCACC TCGGCGTCTC GCCCGACCAC
 CAGGGCAAGG GTCTGGGCG CGCCGCTGTG CTCCCGGAG TGGAGGCGGC CGAGCGCGCC GGGGTGCCCG
 CCTTCTGGA GACCTCCGCG CCCACAACC TCCCCTTCTA CGAGCGGCTC GGCTTACCAG TCACCGCCGA
 CGTCGAGGTG CCCGAAGGAC CGCGCACCTG GTGCATGACC CGCAAGCCCG GTGCCTGACG CCCGCCAC
 GACCCGACG GCCCGACCGA AAGGAGCGCA CGACCCATG CATCGATGAT ATCAGATCCC CCGGATGCAG
 AAATTGATGA TCTATTAAC AATAAAGATG TCCACTAAA TGGAAAGTTT TCCTGCATA CTTTGTAAAG
 AAGGGTGAGA ACAGAGTACC TACATTTTGA ATGGAAGGAT TGGAGTACG GGGGTGGGG TGGGTGGGA
 TTAGATAAAT GCCTGCTCTT TACTGAAGGC TCTTACTAT TGCTTTATGA TAATGTTTCA TAGTTGATA
 TCATAATTA AACAAGCAA ACCAAATTAA GGGCCAGCTC ATTCCTCCA CTCATGATCT ATAGATCTAT
 AGATCTCTCG TGGATCATT GTTTTTCTCT TGATTCCAC TTTGTGGTTC TAAGTACTGT GGTTCACAA
 TGTGTCAGTT TCATAGCCTG AAGAACGAGA TCAGCAGCCT CTGTTCCACA TACACTTCAT TCTCAGTATT
 GTTTTGCAA GTTCTAATC CATCAGAAGC TGGTCGAGAT CCGGAACCCT TAATATAACT TCGTATAATG
 TATGCTATAC GAAGTTATTA GGTCCCTCGA AGAGTTTAC TAGGCGCGCC GTGGAGGGG CGAGGGCTG
 GGACCCGTG AGGGTTCGG GCCGAGCCG GAGGCCGAG GGGCCGGTG GTCGCCGCC GCGGGGCCG
 AGGATGCGG GGCCCGGGC CCGTGAGGG ACCCAGGCC GGACCGAGCC GGGAGGCCA GGGGCTGGTC
 TGGCCGGGG CGCCTGCGG ACCTCTCGGA GGCTGGGAG GAGGCAGCCG GCGGAGGGCG GCGGGGGCC
 GGTGCGCTCG GGGCCCGGG CCTGCTGAAT CACCCGCGC CCTCCGCGC GGGGTGCTG CCGTACCCG
 GCCACCGCC CCCCAGCA GCGCTGCGG GCGAGGGTCG CGTTCTGGG GCCAACAGC CCCCAGGGC
 CGCTGGGC GTTCGGCTCT GAAGCGGGG TCGCCGGGA CCCAGCGCT CACCTCAGG GCTGGTTTT

CCGTTCGAGGG AGCCCGCCCG GGTGCGAGTG CCTTTACAG ACCTCAGTGC CTCGGTCGAG AGGAGGGGAA
 TGTGCTGGGC CCCGGCCTCG CCGCGCCCG GACGGCCAC AGCGGTGTTG CCAGTTCCTG TCTGTAGCCC
 AGGAGCTGGG GTGGGAGACT ACCTCAGTCT TCACTGACTG ACTGACTGGA AAGTCCTCTC CACTGACTGT
 AGCCTCCAAT TCACTGGCCG TCGTTTTACA ACGTCGTGAC TGGGAAAACC CTGGCGTTAC CCAACTTAAT
 CGCCTTGACG CACATCCCC TTTCCGCCAG TGGCGTAATA GCGAAGAGGC CCGCACCGAT CGCCCTTCCC
 AACAGTTGCG CAGCCTGAAT GCGGAATGGC GCCTGATGCG GTATTTTCTC CTTACGCATC TGTGCGGTAT
 TTCACACCGC ATACGTCAA GCAACCATAG TACGCGCCCT GTAGCGGCGC ATTAAGCGCG GCGGGTGTGG
 TGGTTACGCG CAGCGTGACC GCTACACTTG CCAGCGCCCT AGCGCCCGCT CCTTTTCGTT TCTTCCCTTC
 CTTTCTCGCC ACGTTGCGCG GCTTTCCCG TCAAGCTCTA AATCGGGGGC TCCCTTTAGG GTTCCGATTT
 AGTGCTTTAC GGCACCTCGA CCCCAAAAAA CTTGATTTGG GTGATGGTTC ACGTAGTGGG CCATCGCCCT
 GATAGACGGT TTTTCGCCCT TTGACGTTGG AGTCCACGTT CTTAATAGT GGACTCTTGT TCCAACTGG
 AACAACTC AACCTATCT CGGGCTATTC TTTTGATTTA TAAGGGATTT TGCCGATTTT GGCCTATTGG
 TTAATAATG AGCTGATTTA AAAAAATTT AACGCGAATT TTAACAAAAT ATTAACGTTT ACAATTTTAT
 GGTGCACTCT CAGTACAATC TGCTCTGATG CCGCATAGTT AAGCCAGCCC CGACACCCGC CAACACCCGC
 TGACGCGCCC TGACGGGCTT GTCTGCTCCC GGCATCCGCT TACAGACAAG CTGTGACCGT CAACGGGAGC
 TGCATGTGTC AGAGGTTTTT ACCGTCATCA CCGAAACGCG CGACCCGAAA GGGCCTCGTG ATACGCCTAT
 TTTTATAGGT TAATGTCATG ATAATAATGG TTTCTTAGAC GTCAGGTGGC ACTTTTCGGG GAAATGTGCG
 CGGAACCCCT ATTTGTTTAT TTTTCTAAT ACATTCAAAT ATGTATCCGC TCATGAGACA ATAACCCTGA
 TAAATGCTTC AATAATATTG AAAAAGGAAG AGTATGAGTA TTCAACATTT CCGTGTGCGC CTTATTTCCCT
 TTTTTCGGC ATTTTGCCTT CCTGTTTTTG CTCACCCAGA AACGCTGGTG AAAGTAAAAG ATGCTGAAGA
 TCAGTTGGGT GCACGAGTGG GTTACATCGA ACTGGATCTC AACAGCGGTA AGATCCTTGA GAGTTTTCGC
 CCCGAAGAAC GTTTTCCAAT GATGAGCACT TTTAAAGTTC TGCTATGTGG CGCGGTATTA TCCCGTATTG
 ACGCCGGGCA AGAGCAACTC GGTCGCCGCA TACACTATTC TCAGAATGAC TTGGTTGAGT ACTCACCAGT
 CACAGAAAAG CATCTTACGG ATGGCATGAC AGTAAGAGAA TTATGCAGTG CTGCCATAAC CATGAGTGAT
 AACACTGCGG CCAACTTACT TCTGACAACG ATCGGAGGAC CGAAGGAGCT AACCGCTTTT TTGCACAACA
 TGGGGGATCA TGTAACCTCGC CTT

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_022818](#)

UniProt ID:

[Q9GZQ8](#)

Synonyms:

ATG8F; LC3B; MAP1A/1BLC3; MAP1LC3B-a

Summary:

The product of this gene is a subunit of neuronal microtubule-associated MAP1A and MAP1B proteins, which are involved in microtubule assembly and important for neurogenesis. Studies on the rat homolog implicate a role for this gene in autophagy, a process that involves the bulk degradation of cytoplasmic component. [provided by RefSeq, Jul 2008]

Product images:

