

Product datasheet for **KN200395BN**

Apolipoprotein E (APOE) Human Gene Knockout Kit (CRISPR)

Product data:

Product Type:	Knockout Kits (CRISPR)
Format:	2 gRNA vectors, 1 mBFP-Neo donor, 1 scramble control
Donor DNA:	mBFP-Neo
Symbol:	Apolipoprotein E
Locus ID:	348
Components:	KN200395G1 , Apolipoprotein E gRNA vector 1 in pCas-Guide CRISPR vector (GE100002), Target Sequence: TCAGGAGAGCTACTCGGGGT KN200395G2 , Apolipoprotein E gRNA vector 2 in pCas-Guide CRISPR vector (GE100002), Target Sequence: GTAGCTCTCCTGAGACTACC KN200395BND , donor DNA containing left and right homologous arms and mBFP-Neo functional cassette.

Homologous arm and mBFP-Neo sequences:

pUC vector backbone in gray; Left arm sequence in blue; mBFP-Neo in green; Right arm in violet

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GAGATGGGGT TTCACCATGT TGGCCAGGCT GGTCTCAAAC TCCTGACCTT AAGTGATTCTG CCCACTGTGG
CCTCCCAAAG TGCTGGGATT ACAGGCGTGA GCTACCGCCC CCAGCCCCTC CCATCCCCTT TCTGTCCAGC
CCCTAGCCC TACTTTCTTT CTGGGATCCA GGAGTCCAGA TCCCAGCCC CCTCTCCAGA TTACATTCAT
CCAGGCACAG GAAAGGACAG GGTCAGGAAA GGAGGACTCT GGGCGGCAGC CTCCACATTC CCCTTCCAGC
CTTGGCCCC AGAATGGAGG AGGGTGTCTG TATTACTGGG CGAGGTGTCC TCCCTTCTG GGGACTGTGG
GGGGTGGTCA AAAGACCTCT ATGCCACC TCCTTCCTCC CTCTGCCCTG CTGTGCCTGG GGCAGGGGGA
GAACAGCCA CCTCGTACT GGGGGCTGGC CCAGCCCACC CTATCCCTGG GGGAGGGGGC GGGACAGGGG
GAGCCCTATA ATTGGACAAG TCTGGATCC TTGAGTCTTA CTCAGCCCCA GCGGAGGTGA AGGACGTCTT
TCCCCAGGAG CCGGTGAGAA GCGCAGTCGG GGGCAGGGG CTGGGCAGCA GAGACGACCC GACCCGCTAG
AAGGTGGGGT GGGGAGAGCA GCTGGACTGG GATGTAAGCC ATAGCAGGAC TCCACGAGTT GTCACATCA
TTTATCGAGC ACCTACTGGG TGTCCCCAGT GTCCTCAGAT CTCCATAACT GGGGAGCCAG GGGCAGCGAC
ACGGTAGCTA GCCGTCGATT GGAGAACTTT AAAATGAGGA CTGAATTAGC TCATAAATGG AACACGGCGC
TTAACTGTGA GGTGGAGCT TAGAATGTGA AGGGAGAATG AGGAATGCCA GACTGGGACT GAGATGGAAC
CGGCGGTGGG GAGGGGGTGG GGGGATGGAA TTTGAACCCC GGGAGAGGAA GATGGAATTT TCTATGGAGG
CCGACCTGGG GATGGGGAGA TAAGAGAAGA CCAGGAGGGA GTTAAATAGG GAATGGGTTG GGGGCGGCTT
GGTAAATGTG CTGGGATTAG GCTGTTGAG ATAATGCAAC AAGGCTTGGG AGGCTAACCT GGGGTGAGGC
CGGGTTGGGG CCGGGCTGGG GGTGGGAGGA GTCCTCACTG GCGGTTGATT GACAGTTTCT CCTTCCCCAG
ACTGGCCAAT
```

GE100003, scramble sequence in pCas-Guide vector



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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_000041](#), [NM_001302688](#), [NM_001302689](#), [NM_001302690](#), [NM_001302691](#)

UniProt ID: [P02649](#)

Synonyms: AD2; APO-E; LDLQC5; LPG

Summary: The protein encoded by this gene is a major apoprotein of the chylomicron. It binds to a specific liver and peripheral cell receptor, and is essential for the normal catabolism of triglyceride-rich lipoprotein constituents. This gene maps to chromosome 19 in a cluster with the related apolipoprotein C1 and C2 genes. Mutations in this gene result in familial dysbetalipoproteinemia, or type III hyperlipoproteinemia (HLP III), in which increased plasma cholesterol and triglycerides are the consequence of impaired clearance of chylomicron and VLDL remnants. [provided by RefSeq, Jun 2016]

Product images:

