

Product datasheet for KN200395RB

OriGene Technologies, Inc.

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

Product data:

Product Type: Knockout Kits (CRISPR)

Format: 2 gRNA vectors, 1 RFP-BSD donor, 1 scramble control

Donor DNA: RFP-BSD

Symbol: Apolipoprotein E

Locus ID: 348

Components: KN200395G1, Apolipoprotein E gRNA vector 1 in pCas-Guide CRISPR vector (GE100002)

KN200395G2, Apolipoprotein E gRNA vector 2 in pCas-Guide CRISPR vector (GE100002) **KN200395RBD**, donor DNA containing left and right homologous arms and RFP-BSD

functional cassette.

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 000041, NM 001302688, NM 001302689, NM 001302690, NM 001302691

UniProt ID: <u>P02649</u>

Synonyms: AD2; APO-E; LDLCQ5; 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:

Donor Vector Edited Chromosome



RFP, Luc, and mBFP will be under native gene promoter