

## Product datasheet for KN204260RB

#### OriGene Technologies, Inc.

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### **Acetyl CoA synthetase (ACSS2) 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:** Acetyl CoA synthetase

**Locus ID:** 55902

**Components: KN204260G1**, Acetyl CoA synthetase gRNA vector 1 in pCas-Guide CRISPR vector (GE100002)

**KN204260G2**, Acetyl CoA synthetase gRNA vector 2 in pCas-Guide CRISPR vector (GE100002)

KN204260RBD, 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 001076552, NM 001242393, NM 018677, NM 139274, NR 028046

UniProt ID: Q9NR19

Synonyms: ACAS2; ACECS; ACSA; dJ1161H23.1

**Summary:** This gene encodes a cytosolic enzyme that catalyzes the activation of acetate for use in lipid

synthesis and energy generation. The protein acts as a monomer and produces acetyl-CoA from acetate in a reaction that requires ATP. Expression of this gene is regulated by sterol regulatory element-binding proteins, transcription factors that activate genes required for the synthesis of cholesterol and unsaturated fatty acids. Alternative splicing results in multiple

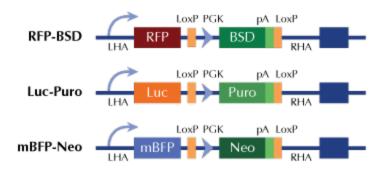
transcript variants. [provided by RefSeg, Jul 2009]





# **Product images:**

#### Donor Vector Edited Chromosome



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