OriGene Technologies, Inc.
9620 Medical Center Drive, Ste 200
Rockville, MD 20850, US
Phone: +1-888-267-4436
https://www.origene.com
techsupport@origene.com
EU: info-de@origene.com
CN: techsupport@origene.cn

Product datasheet for KN204260

Acetyl CoA synthetase (ACSS2) 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: Acetyl CoA synthetase

Locus ID: 55902

Components: **KN204260G1**, Acetyl CoA synthetase gRNA vector 1 in pCas-Guide CRISPR vector (GE100002), Target Sequence: GCGGAGACCAACTCCGCGCC
KN204260G2, Acetyl CoA synthetase gRNA vector 2 in pCas-Guide CRISPR vector (GE100002), Target Sequence: GGCTTCCTGAGGAGCGGGTC
KN204260D, 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

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GGGATCATGT AACTCGCCTT

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.

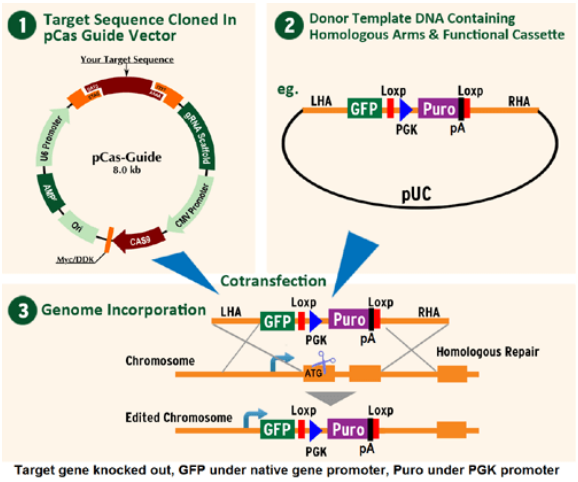
RefSeq: NM_001076552, NM_001242393, NM_018677, NM_139274, NR_028046

UniProt ID: Q9NR19

Synonyms: ACAS2; ACECS; ACS; 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 RefSeq, Jul 2009]

Product images:



Target gene knocked out, GFP under native gene promoter, Puro under PGK promoter