

## Product datasheet for **KN208032**

### ACSL3 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:       | ACSL3  |
| Locus ID:     | 2181   |
| Components:   | <p><b>KN208032G1</b>, ACSL3 gRNA vector 1 in pCas-Guide CRISPR vector (GE100002), Target Sequence: TAGATGGTTTTGAAGACACG</p> <p><b>KN208032G2</b>, ACSL3 gRNA vector 2 in pCas-Guide CRISPR vector (GE100002), Target Sequence: TATCTAAAGTATCACATCCA</p> <p><b>KN208032D</b>, donor DNA containing left and right homologous arms and GFP-puro functional cassette.</p> |

#### 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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AAGGCGAGTT ACATGATCCC CCATGTTGTG CAAAAAAGCG GTTAGCTCCT TCGGTCCTCC GATCGTTGTC
AGAAGTAAGT TGGCCGCAGT GTTATCACTC ATGGTTATGG CAGCACTGCA TAATTCTCTT ACTGTCATGC
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 TACAGGCATC GTGGTGTAC GCTCGTCGTT TGGTATGGCT TCATTCAGCT CCGGTTCCCA ACGATC

**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\\_004457](#), [NM\\_203372](#), [NM\\_001354158](#), [NM\\_001354159](#), [N44998](#)

**UniProt ID:**

[O95573](#)

**Synonyms:**

ACS3; FACL3; PRO2194

**Summary:**

The protein encoded by this gene is an isozyme of the long-chain fatty-acid-coenzyme A ligase family. Although differing in substrate specificity, subcellular localization, and tissue distribution, all isozymes of this family convert free long-chain fatty acids into fatty acyl-CoA esters, and thereby play a key role in lipid biosynthesis and fatty acid degradation. This isozyme is highly expressed in brain, and preferentially utilizes myristate, arachidonate, and eicosapentaenoate as substrates. The amino acid sequence of this isozyme is 92% identical to that of rat homolog. Two transcript variants encoding the same protein have been found for this gene. [provided by RefSeq, Jul 2008]

Product images:

