

Product datasheet for **KN316688**

Sptlc3 Mouse 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: Sptlc3
Locus ID: 228677
Components: **KN316688G1**, Sptlc3 gRNA vector 1 in pCas-Guide CRISPR vector (GE100002), Target Sequence: ACGACAGTGCTGTTACAAAT
KN316688G2, Sptlc3 gRNA vector 2 in pCas-Guide CRISPR vector (GE100002), Target Sequence: CACAATCCTAAGACCCAGCA
KN316688D, 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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AGAAGTAAGT TGGCCGAGT 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_175467](#), [NM_001356507](#)

UniProt ID:

[Q8BG54](#)

Synonyms:

C130053K05Rik

Summary:

Serine palmitoyltransferase (SPT). The heterodimer formed with LCB1/SPTLC1 constitutes the catalytic core. The composition of the serine palmitoyltransferase (SPT) complex determines the substrate preference. SPT complexes containing SPTLC3 generate shorter chain sphingoid bases compared to complexes containing SPTLC2. The SPTLC1-SPTLC3-SPTSSA isozyme uses C12-CoA, C14-CoA and C16-CoA as substrates, with a slight preference for C14-CoA. On the other hand, the SPTLC1-SPTLC3-SPTSSB has the ability to use a broader range of acyl-CoAs without apparent preference.[UniProtKB/Swiss-Prot Function]

Product images:

