

## Product datasheet for **KN316864**

### Stim1 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:       | Stim1  |
| Locus ID:     | 20866  |
| Components:   | <p><b>KN316864G1</b>, Stim1 gRNA vector 1 in pCas-Guide CRISPR vector (GE100002), Target Sequence: TGTGCGCCCGTCTTGCCCTG</p> <p><b>KN316864G2</b>, Stim1 gRNA vector 2 in pCas-Guide CRISPR vector (GE100002), Target Sequence: TTGGGGGCTCCTTCTGCATC</p> <p><b>KN316864D</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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TCAGAGCAGA TTGTA CTGAG AGTGCACCAT ATGCGGTGTG AAATACCGCA CAGATGCGTA AGGAGAAAAT
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CGTTTCATCG GTATCATTAC CCCCATGAAC AGAAATCCCC CTTACACGGA GGCATCAGTG ACCAAACAGG
AAAAAACCGC CCTTAACATG GCCCGC

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**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\\_009287](#)

**UniProt ID:**

[P70302](#)

**Synonyms:**

SIM

**Summary:**

Plays a role in mediating store-operated Ca(2+) entry (SOCE), a Ca(2+) influx following depletion of intracellular Ca(2+) stores. Acts as Ca(2+) sensor in the endoplasmic reticulum via its EF-hand domain. Upon Ca(2+) depletion, translocates from the endoplasmic reticulum to the plasma membrane where it activates the Ca(2+) release-activated Ca(2+) (CRAC) channel subunit ORAI1. Involved in enamel formation. Activated following interaction with STIMATE, leading to promote STIM1 conformational switch.[UniProtKB/Swiss-Prot Function]

**Product images:**
