

Product datasheet for **KN223406**

SIK3 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: SIK3
Locus ID: 23387
Components: **KN223406G1**, SIK3 gRNA vector 1 in pCas-Guide CRISPR vector (GE100002), Target Sequence: TGCTGCCTCCGCCCGCGCCG
KN223406G2, SIK3 gRNA vector 2 in pCas-Guide CRISPR vector (GE100002), Target Sequence: CGGCGGCGAGCGGAGCTGGC
KN223406D, 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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TGGCAACAAC GTTGCACAAA CTATTAACCTG GCGAACTACT TACTCTAGCT TCCCAGCAAC AATTAATAGA
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CACTGCGGCC AACTTACTTC TGACAACGAT CGGAGGACCG AAGGAGCTAA CCGCTTTTTT GCACAACATG
GGGGATCATG TAACTCGCCT T

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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_001281748](#), [NM_001281749](#), [NM_025164](#), [NM_001366686](#), [NM_001366687](#)

UniProt ID:

[Q9Y2K2](#)

Synonyms:

L19; QSK; SIK-3

Summary:

Positive regulator of mTOR signaling that functions by triggering the degradation of DEPTOR, an mTOR inhibitor. Involved in the dynamic regulation of mTOR signaling in chondrocyte differentiation during skeletogenesis (PubMed:30232230). Negatively regulates cAMP signaling pathway possibly by acting on CRTC2/TORC2 and CRTC3/TORC3 (Probable). Prevents HDAC4 translocation to the nucleus (By similarity).[UniProtKB/Swiss-Prot Function]

Product images:

