

Product datasheet for **KN200190**

SIRT3 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: SIRT3
Locus ID: 23410
Components: **KN200190G1**, SIRT3 gRNA vector 1 in pCas-Guide CRISPR vector (GE100002), Target Sequence: CCGGGTAGTTGAACGGGTCG
KN200190G2, SIRT3 gRNA vector 2 in pCas-Guide CRISPR vector (GE100002), Target Sequence: GTTCTGGGGTTGGCGCGCCG
KN200190D, 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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 TGGGGGATCA TGTAACCTCG CTT

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_001017524](#), [NM_012239](#), [NM_001370312](#), [NM_001370314](#), [NM_001370316](#),
[NM_001370318](#), [NM_001370319](#), [NM_001370325](#), [NR_163386](#), [NR_163388](#), [NR_163389](#),
[NR_163390](#), [NR_163391](#), [NR_163393](#), [NR_163394](#), [NR_163398](#), [NR_163399](#), [NR_163400](#),
[NR_163401](#), [NM_001370310](#), [NM_001370315](#), [NM_001370317](#), [NM_001370320](#),
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[NR_163395](#), [NR_163396](#), [NR_163397](#), [NR_163402](#)

UniProt ID:

[Q9NTG7](#)

Synonyms:

SIR2L3

Summary:

SIRT3 encodes a member of the sirtuin family of class III histone deacetylases, homologs to the yeast Sir2 protein. The encoded protein is found exclusively in mitochondria, where it can eliminate reactive oxygen species, inhibit apoptosis, and prevent the formation of cancer cells. SIRT3 has far-reaching effects on nuclear gene expression, cancer, cardiovascular disease, neuroprotection, aging, and metabolic control. [provided by RefSeq, May 2019]

Product images:

