

Product datasheet for KN315806BN

Sirt6 Mouse Gene Knockout Kit (CRISPR)

Product data:

Product Type: Knockout Kits (CRISPR)

Format: 2 gRNA vectors, 1 mBFP-Neo donor, 1 scramble control

Donor DNA: mBFP-Neo

Symbol: Sirt6 50721 Locus ID:

KN315806G1, Sirt6 gRNA vector 1 in pCas-Guide CRISPR vector (GE100002) Components:

KN315806G2, Sirt6 gRNA vector 2 in pCas-Guide CRISPR vector (GE100002)

KN315806BND, donor DNA containing left and right homologous arms and mBFP-Neo

functional cassette.

GE100003, scramble sequence in pCas-Guide vector

NM 001163430, NM 181586 RefSeq:

UniProt ID: P59941

Synonyms: 2810449N18Rik; AI043036; Sir2l6

Summary: NAD-dependent protein deacetylase. Has deacetylase activity towards histone H3K9Ac and

> H3K56Ac. Modulates acetylation of histone H3 in telomeric chromatin during the S-phase of the cell cycle. Deacetylates histone H3K9Ac at NF-kappa-B target promoters and may down-

regulate the expression of a subset of NF-kappa-B target genes. Deacetylation of

nucleosomes interferes with RELA binding to target DNA. May be required for the association

of WRN with telomeres during S-phase and for normal telomere maintenance. On DNA

damage, promotes DNA end resection via deacetylation of RBBP8. Has very weak deacetylase activity and can bind NAD(+) in the absence of acetylated substrate (By similarity). Acts as a corepressor of the transcription factor Hif1a to control the expression of multiple glycolytic genes to regulate glucose homeostasis. Required for genomic stability. Required for normal IGF1 serum levels and normal glucose homeostasis. Modulates cellular senescence and

apoptosis. Regulates the production of TNF protein. Has a role in the regulation of life span in

male mice, but not in female mice.[UniProtKB/Swiss-Prot Function]



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Product images:

Donor Vector Edited Chromosome



RFP, Luc, and mBFP will be under native gene promoter