

## Product datasheet for KN223406LP

# OriGene Technologies, Inc.

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## **SIK3 Human Gene Knockout Kit (CRISPR)**

#### **Product data:**

**Product Type:** Knockout Kits (CRISPR)

**Format:** 2 gRNA vectors, 1 Luciferase-Puro donor, 1 scramble control

**Donor DNA:** Luciferase-Puro

Symbol: SIK3 Locus ID: 23387

**Components: KN223406G1**, SIK3 gRNA vector 1 in pCas-Guide CRISPR vector (GE100002)

KN223406G2, SIK3 gRNA vector 2 in pCas-Guide CRISPR vector (GE100002)

KN223406LPD, donor DNA containing left and right homologous arms and Luciferase-Puro

functional cassette.

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

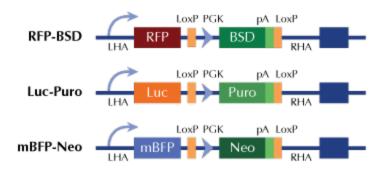
signaling pathway possibly by acting on CRTC2/TORC2 and CRTC3/TORC3 (Probable). Prevents

HDAC4 translocation to the nucleus (By similarity).[UniProtKB/Swiss-Prot Function]



## **Product images:**

### Donor Vector Edited Chromosome



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