

Product datasheet for KN209149LP

OriGene Technologies, Inc.

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Unrip (STRAP) 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: Unrip Locus ID: 11171

Components: KN209149G1, Unrip gRNA vector 1 in pCas-Guide CRISPR vector (GE100002)

KN209149G2, Unrip gRNA vector 2 in pCas-Guide CRISPR vector (GE100002)

KN209149LPD, 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: <u>NM 007178</u>

UniProt ID: Q9Y3F4

Synonyms: MAWD; PT-WD; UNRIP

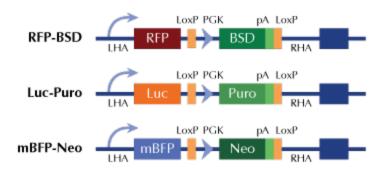


Summary:

The SMN complex plays a catalyst role in the assembly of small nuclear ribonucleoproteins (snRNPs), the building blocks of the spliceosome. Thereby, plays an important role in the splicing of cellular pre-mRNAs. Most spliceosomal snRNPs contain a common set of Sm proteins SNRPB, SNRPD1, SNRPD2, SNRPD3, SNRPE, SNRPF and SNRPG that assemble in a heptameric protein ring on the Sm site of the small nuclear RNA to form the core snRNP. In the cytosol, the Sm proteins SNRPD1, SNRPD2, SNRPE, SNRPF and SNRPG are trapped in an inactive 6S plCln-Sm complex by the chaperone CLNS1A that controls the assembly of the core snRNP. Dissociation by the SMN complex of CLNS1A from the trapped Sm proteins and their transfer to an SMN-Sm complex triggers the assembly of core snRNPs and their transport to the nucleus. STRAP plays a role in the cellular distribution of the SMN complex. Negatively regulates TGF-beta signaling but positively regulates the PDPK1 kinase activity by enhancing its autophosphorylation and by significantly reducing the association of PDPK1 with 14-3-3 protein.[UniProtKB/Swiss-Prot Function]

Product images:

Donor Vector Edited Chromosome



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