

Product datasheet for KN303046LP

OriGene Technologies, Inc.

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Cdk5rap2 Mouse 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: Cdk5rap2 Locus ID: 214444

Components: KN303046G1, Cdk5rap2 gRNA vector 1 in pCas-Guide CRISPR vector (GE100002)

KN303046G2, Cdk5rap2 gRNA vector 2 in pCas-Guide CRISPR vector (GE100002)

KN303046LPD, 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 001313762</u>, <u>NM 145990</u>

UniProt ID: Q8K389

Synonyms: 2900018K03Rik; an; mKIAA1633

Summary: Potential regulator of CDK5 activity via its interaction with CDK5R1. Negative regulator of

centriole disengagement (licensing) which maintains centriole engagement and cohesion (PubMed:20627074). Involved in regulation of mitotic spindle orientation (PubMed:20460369). Plays a role in the spindle checkpoint activation by acting as a transcriptional regulator of both BUBR1 and MAD2 promoter. Required for the recruitment of AKAP9 to centrosomes (By similarity). Plays a role in neurogenesis (PubMed:20471352). Contrary to higher mammalian

orthologs, including human, chimpanzee, bovine and dog, does not interact with

EB1/MAPRE1, therefore its function in the regulation of microtubule dynamics is unclear

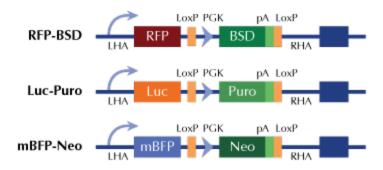
(PubMed:19553473).[UniProtKB/Swiss-Prot Function]





Product images:

Donor Vector Edited Chromosome



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