

## Product datasheet for KN303046

## Cdk5rap2 Mouse 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 Cdk5rap2 Symbol: Locus ID: 214444

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

Sequence: GACTCGGGGATGGAAGAGA

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

Sequence: GCCCTGCCTGGGACCCTCAG

KN303046D, donor DNA containing left and right homologous arms and GFP-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.

NM 001313762, NM 145990 RefSeq:

**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]



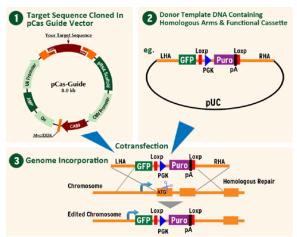
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## **Product images:**



Target gene knocked out, GFP under native gene promoter, Puro under PGK promoter