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Product datasheet for KN304817

Drosha 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
Symbol:	Drosha
Locus ID:	14000
Components:	**KN304817G1**, Drosha gRNA vector 1 in pCas-Guide CRISPR vector (GE100002), Target Sequence: TACGTGGTAAGTGGTATTCT **KN304817G2**, Drosha gRNA vector 2 in pCas-Guide CRISPR vector (GE100002), Target Sequence: GGGAAGGTAGTGCGCCAGAG **KN304817D**, donor DNA containing left and right homologous arms and GFP-puro functional cassette. Homologous arm and GFP-puro sequences:

pUC vector backbone in gray; Left arm sequence in blue; GFP-puro in green; Right arm in violet

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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_001130149, NM_026799

UniProt ID: Q5HZJ0

Synonyms: 1110013A17Rik; AI874853; Etohi2; Rn3; Rnasen

Summary: Ribonuclease III double-stranded (ds) RNA-specific endoribonuclease that is involved in the initial step of microRNA (miRNA) biogenesis. Component of the microprocessor complex that is required to process primary miRNA transcripts (pri-miRNAs) to release precursor miRNA (pre-miRNA) in the nucleus. Within the microprocessor complex, DROSHA cleaves the 3' and 5' strands of a stem-loop in pri-miRNAs (processing center 11 bp from the dsRNA-ssRNA junction) to release hairpin-shaped pre-miRNAs that are subsequently cut by the cytoplasmic DICER to generate mature miRNAs. Involved also in pre-rRNA processing. Cleaves double-strand RNA and does not cleave single-strand RNA. Involved in the formation of GW bodies. [UniProtKB/Swiss-Prot Function]

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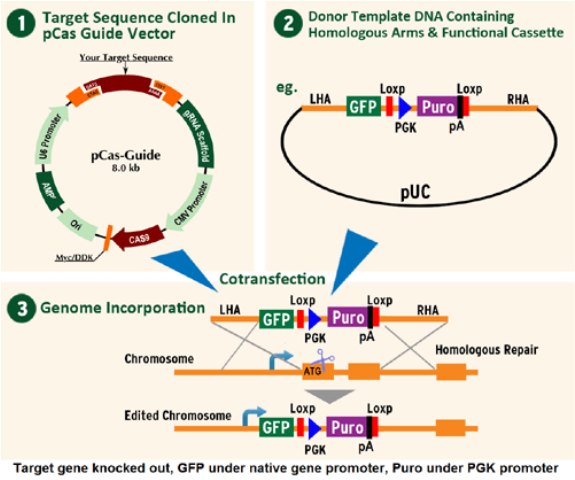

Target gene knocked out, GFP under native gene promoter, Puro under PGK promoter

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