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Product datasheet for KN209023

Two pore calcium channel protein 2 (TPCN2) Human 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: Two pore calcium channel protein 2

Locus ID: 219931

Components: **KN209023G1**, Two pore calcium channel protein 2 gRNA vector 1 in pCas-Guide CRISPR vector (GE100002), Target Sequence: GACTTGGATGCTGCGGTAAG
KN209023G2, Two pore calcium channel protein 2 gRNA vector 2 in pCas-Guide CRISPR vector (GE100002), Target Sequence: GTGGCGGCGACTGGCCGGCG
KN209023D, 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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GGATCATGTA ACTCGCCTT

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.

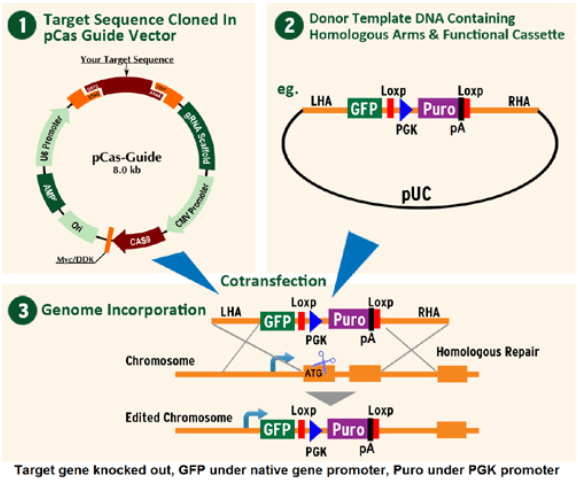
RefSeq: NM_139075

UniProt ID: Q8NHX9

Synonyms: SHEP10; TPC2

Summary: This gene encodes a putative cation-selective ion channel with two repeats of a six-transmembrane-domain. The protein localizes to lysosomal membranes and enables nicotinic acid adenine dinucleotide phosphate (NAADP) -induced calcium ion release from lysosome-related stores. This ubiquitously expressed gene has elevated expression in liver and kidney. Two common nonsynonymous SNPs in this gene strongly associate with blond versus brown hair pigmentation.[provided by RefSeq, Dec 2009]

Product images:



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