

Product datasheet for **KN214417**

HCP1 (SLC46A1) 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: HCP1
Locus ID: 113235
Components: **KN214417G1**, HCP1 gRNA vector 1 in pCas-Guide CRISPR vector (GE100002), Target Sequence: CGGGCGCGGGGCTTTCCGG
KN214417G2, HCP1 gRNA vector 2 in pCas-Guide CRISPR vector (GE100002), Target Sequence: GGAAGACCAGCGGCTCTACC
KN214417D, 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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GGGGATCATG TAACTCGCCT T

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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_001242366](#), [NM_080669](#)

UniProt ID:

[Q96NT5](#)

Synonyms:

G21; HCP1; PCFT

Summary:

This gene encodes a transmembrane proton-coupled folate transporter protein that facilitates the movement of folate and antifolate substrates across cell membranes, optimally in acidic pH environments. This protein is also expressed in the brain and choroid plexus where it transports folates into the central nervous system. This protein further functions as a heme transporter in duodenal enterocytes, and potentially in other tissues like liver and kidney. Its localization to the apical membrane or cytoplasm of intestinal cells is modulated by dietary iron levels. Mutations in this gene are associated with autosomal recessive hereditary folate malabsorption disease. Alternatively spliced transcript variants encoding different isoforms have been described for this gene. [provided by RefSeq, Aug 2013]

Product images:

