

Product datasheet for **KN210709**

Peroxiredoxin 5 (PRDX5) Human Gene Knockout Kit (CRISPR)

Product data:

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| Product Type: | Knockout Kits (CRISPR) |
| Format: | 2 gRNA vectors, 1 GFP-puro donor, 1 scramble control |
| Donor DNA: | GFP-puro |
| Symbol: | Peroxiredoxin 5 |
| Locus ID: | 25824 |
| Components: | KN210709G1 , Peroxiredoxin 5 gRNA vector 1 in pCas-Guide CRISPR vector (GE100002), Target Sequence: TCAGCGGGCTATATACTCGT KN210709G2 , Peroxiredoxin 5 gRNA vector 2 in pCas-Guide CRISPR vector (GE100002), Target Sequence: GTGCGCCCTGAGACGCTCAG KN210709D , 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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 TACAGGCATC GTGGTGTAC GCTCGTCGTT TGGTATGGCT TCATTCAGCT CCGGTTCCCA ACGATC

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_012094](#), [NM_181651](#), [NM_181652](#), [NM_001358511](#), [NM_001358516](#)

UniProt ID:

[P30044](#)

Synonyms:

ACR1; AOEB166; B166; HEL-S-55; PLP; PMP20; PRDX6; prx-V; PRXV; SBBI10

Summary:

This gene encodes a member of the peroxiredoxin family of antioxidant enzymes, which reduce hydrogen peroxide and alkyl hydroperoxides. The encoded protein interacts with peroxisome receptor 1 and plays an antioxidant protective role in different tissues under normal conditions and during inflammatory processes. The use of alternate transcription start sites is thought to result in transcript variants that use different in-frame translational start codons to generate isoforms that are targeted to the mitochondrion (isoform L) or peroxisome/cytoplasm (isoform S). Multiple related pseudogenes have been defined for this gene. [provided by RefSeq, Nov 2017]

Product images:

