

## **Product datasheet for KN210709RB**

#### OriGene Technologies, Inc.

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

**Product data:** 

**Product Type:** Knockout Kits (CRISPR)

**Format:** 2 gRNA vectors, 1 RFP-BSD donor, 1 scramble control

Donor DNA: RFP-BSD

**Symbol:** Peroxiredoxin 5

**Locus ID:** 25824

**Components: KN210709G1**, Peroxiredoxin 5 gRNA vector 1 in pCas-Guide CRISPR vector (GE100002)

**KN210709G2**, Peroxiredoxin 5 gRNA vector 2 in pCas-Guide CRISPR vector (GE100002) **KN210709RBD**, donor DNA containing left and right homologous arms and RFP-BSD

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.

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

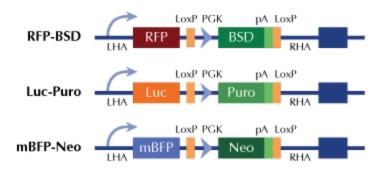
gene. [provided by RefSeq, Nov 2017]





# **Product images:**

### Donor Vector Edited Chromosome



RFP, Luc, and mBFP will be under native gene promoter