

Product datasheet for **KN210792**

PKR (EIF2AK2) 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:	PKR
Locus ID:	5610
Components:	<p>KN210792G1, PKR gRNA vector 1 in pCas-Guide CRISPR vector (GE100002), Target Sequence: TAATACATACCGTCAGAAGC</p> <p>KN210792G2, PKR gRNA vector 2 in pCas-Guide CRISPR vector (GE100002), Target Sequence: TATCAAGAAGTGCCTAATTC</p> <p>KN210792D, donor DNA containing left and right homologous arms and GFP-puro functional cassette.</p>

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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AGAAGTAAGT TGGCCGAGT GTTATCACTC ATGGTTATGG CAGCACTGCA TAATTCTCTT ACTGTCATGC
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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_001135651](#), [NM_001135652](#), [NM_002759](#)

UniProt ID:

[P19525](#)

Synonyms:

EIF2AK1; PKR; PPP1R83; PRKR

Summary:

The protein encoded by this gene is a serine/threonine protein kinase that is activated by autophosphorylation after binding to dsRNA. The activated form of the encoded protein can phosphorylate translation initiation factor EIF2S1, which in turn inhibits protein synthesis. This protein is also activated by manganese ions and heparin. Three transcript variants encoding two different isoforms have been found for this gene. [provided by RefSeq, Oct 2011]

Product images:

