

Product datasheet for **KN216630**

DNA PKcs (PRKDC) 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:	DNA PKcs
Locus ID:	5591
Components:	<p>KN216630G1, DNA PKcs gRNA vector 1 in pCas-Guide CRISPR vector (GE100002), Target Sequence: TTGTCCGCTGCGGACCGCTG</p> <p>KN216630G2, DNA PKcs gRNA vector 2 in pCas-Guide CRISPR vector (GE100002), Target Sequence: GGAGCAACGCACACCGGCTC</p> <p>KN216630D, 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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AAGGCGAGTT ACATGATCCC CCATGTTGTG CAAAAAAGCG GTTAGCTCCT TCGGTCCTCC GATCGTTGTC
AGAAGTAAGT TGGCCGAGT GTTATCACTC ATGGTTATGG CAGCACTGCA TAATTCTCTT ACTGTCATGC
CATCCGTAAG ATGCTTTTCT GTGACTGGTG AGTACTCAAC CAAGTCATTC TGAGAATAGT GTATGCCGGC
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ATCATTTGAA AACGTTCTTC GGGGCGAAAA CTCTCAAGGA TCTTACCCTG GTTGAGATCC AGTTTCGATGT
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CCTGCGTTTT CGCGGAAAA CTGGGTCCTA CAGCACCAGC TCTCGGGGTG TGTTCTCTA GCGTTGGCTA
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 TAGTTTGC GC AACGTTGTTG CCATTGCTAC AGGCATCGTG GTGTCACGCT CGTCGTTTGG TATGGCTTCA
 TTCAGCTCCG GTTCCCAACG ATC

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_001081640](#), [NM_006904](#)

UniProt ID:

[P78527](#)

Synonyms:

DNA-PKcs; DNAPK; DNPK1; HYRC; HYRC1; IMD26; p350; XRCC7

Summary:

This gene encodes the catalytic subunit of the DNA-dependent protein kinase (DNA-PK). It functions with the Ku70/Ku80 heterodimer protein in DNA double strand break repair and recombination. The protein encoded is a member of the PI3/PI4-kinase family.[provided by RefSeq, Jul 2010]

Product images:

