

Product datasheet for **KN224742**

POLE 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:	POLE
Locus ID:	5426
Components:	<p>KN224742G1, POLE gRNA vector 1 in pCas-Guide CRISPR vector (GE100002), Target Sequence: TGTCTCTGAGGAGCGGCGGG</p> <p>KN224742G2, POLE gRNA vector 2 in pCas-Guide CRISPR vector (GE100002), Target Sequence: CCGGCCCGAGAGCCTCAGGA</p> <p>KN224742D, 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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TGGCAACAAC GTTGCACAAA CTATTAACCTG GCGAACTACT TACTCTAGCT TCCCAGCAAC AATTAATAGA
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ACACTGCGGC CAACTTACTT CTGACAACGA TCGGAGGACC GAAGGAGCTA ACCGCTTTTT TGCACAACAT
GGGGGATCAT GTAACCTGCC TT

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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_006231](#)

UniProt ID:

[Q07864](#)

Synonyms:

CRCS12; FILS; POLE1

Summary:

This gene encodes the catalytic subunit of DNA polymerase epsilon. The enzyme is involved in DNA repair and chromosomal DNA replication. Mutations in this gene have been associated with colorectal cancer 12 and facial dysmorphism, immunodeficiency, livedo, and short stature. [provided by RefSeq, Sep 2013]

Product images:

