

Product datasheet for **KN216765**

POLR2A 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:	POLR2A
Locus ID:	5430
Components:	<p>KN216765G1, POLR2A gRNA vector 1 in pCas-Guide CRISPR vector (GE100002), Target Sequence: TTACCAGTTCATCCGGACTC</p> <p>KN216765G2, POLR2A gRNA vector 2 in pCas-Guide CRISPR vector (GE100002), Target Sequence: CTCTCTTGATGGTGCGCAGC</p> <p>KN216765D, 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 TGGCCGCAGT GTTATCACTC ATGGTTATGG CAGCACTGCA TAATTCTCTT ACTGTCATGC
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 CTACAGGCAT CGTGGTGTC CGCTCGCTG TTGGTATGGC TTCATTACG TCCGGTTCCC AACGATC

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_000937](#)

UniProt ID:

[P24928](#)

Synonyms:

hRPB220; hsRPB1; POLR2; POLRA; RPB1; RPBh1; RpiILS; RPO2; RPOL2

Summary:

This gene encodes the largest subunit of RNA polymerase II, the polymerase responsible for synthesizing messenger RNA in eukaryotes. The product of this gene contains a carboxy terminal domain composed of heptapeptide repeats that are essential for polymerase activity. These repeats contain serine and threonine residues that are phosphorylated in actively transcribing RNA polymerase. In addition, this subunit, in combination with several other polymerase subunits, forms the DNA binding domain of the polymerase, a groove in which the DNA template is transcribed into RNA. [provided by RefSeq, Jul 2008]

Product images:

