

Product datasheet for **KN204171**

DDX3 (DDX3X) 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:	DDX3
Locus ID:	1654
Components:	<p>KN204171G1, DDX3 gRNA vector 1 in pCas-Guide CRISPR vector (GE100002), Target Sequence: AGTGGAAAATGCGCTCGGGC</p> <p>KN204171G2, DDX3 gRNA vector 2 in pCas-Guide CRISPR vector (GE100002), Target Sequence: TGAGCCGCAAGAACCCACCC</p> <p>KN204171D, 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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 TCGTCGTTTG GTATGGCTT ATTACAGCTCC GGTCCCAAC GATC

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_001193416](#), [NM_001193417](#), [NM_001356](#), [NM_024005](#), [NR_126093](#), [NR_126094](#), [NM_001363819](#)

UniProt ID:

[O00571](#)

Synonyms:

CAP-Rf; DBX; DDX3; DDX14; HLP2

Summary:

The protein encoded by this gene is a member of the large DEAD-box protein family, that is defined by the presence of the conserved Asp-Glu-Ala-Asp (DEAD) motif, and has ATP-dependent RNA helicase activity. This protein has been reported to display a high level of RNA-independent ATPase activity, and unlike most DEAD-box helicases, the ATPase activity is thought to be stimulated by both RNA and DNA. This protein has multiple conserved domains and is thought to play roles in both the nucleus and cytoplasm. Nuclear roles include transcriptional regulation, mRNP assembly, pre-mRNA splicing, and mRNA export. In the cytoplasm, this protein is thought to be involved in translation, cellular signaling, and viral replication. Misregulation of this gene has been implicated in tumorigenesis. This gene has a paralog located in the nonrecombining region of the Y chromosome. Pseudogenes sharing similarity to both this gene and the DDX3Y paralog are found on chromosome 4 and the X chromosome. Alternative splicing results in multiple transcript variants. [provided by RefSeq, Oct 2014]

Product images:
