

Product datasheet for **KN220046**

RAD54 (RAD54L) 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:	RAD54
Locus ID:	8438
Components:	<p>KN220046G1, RAD54 gRNA vector 1 in pCas-Guide CRISPR vector (GE100002), Target Sequence: GAACAGAAACAGTGCCTGCA</p> <p>KN220046G2, RAD54 gRNA vector 2 in pCas-Guide CRISPR vector (GE100002), Target Sequence: GGCTATTCCCAGTCTCCCCT</p> <p>KN220046D, 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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TACAGGCATC GTGGTGTAC GCTCGTCGTT TGGTATGGCT TCATTCAGCT CCGGTTCCCA ACGATC

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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_001142548](#), [NM_003579](#), [NM_001370766](#)

UniProt ID:

[Q92698](#)

Synonyms:

hHR54; HR54; hRAD54; RAD54A

Summary:

The protein encoded by this gene belongs to the DEAD-like helicase superfamily, and shares similarity with *Saccharomyces cerevisiae* Rad54, a protein known to be involved in the homologous recombination and repair of DNA. This protein has been shown to play a role in homologous recombination related repair of DNA double-strand breaks. The binding of this protein to double-strand DNA induces a DNA topological change, which is thought to facilitate homologous DNA pairing, and stimulate DNA recombination. Alternative splicing results in multiple transcript variants encoding the same protein.[provided by RefSeq, Dec 2008]

Product images:

