

Product datasheet for KN220046BN

OriGene Technologies, Inc.

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RAD54 (RAD54L) Human Gene Knockout Kit (CRISPR)

Product data:

Product Type: Knockout Kits (CRISPR)

Format: 2 gRNA vectors, 1 mBFP-Neo donor, 1 scramble control

Donor DNA: mBFP-Neo

Symbol: RAD54

Locus ID: 8438

Components: KN220046G1, RAD54 gRNA vector 1 in pCas-Guide CRISPR vector (GE100002)

KN220046G2, RAD54 gRNA vector 2 in pCas-Guide CRISPR vector (GE100002)

KN220046BND, donor DNA containing left and right homologous arms and mBFP-Neo

functional cassette.

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: <u>NM 001142548</u>, <u>NM 003579</u>, <u>NM 001370766</u>

UniProt ID: Q92698

Synonyms: hHR54; HR54; hRAD54; RAD54A

Summary: The protein encoded by this gene belongs to the DEAD-like helicase superfamily, and shares

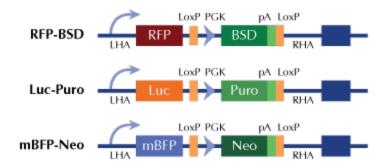
similarity with Saccharomyces cerevisiae Rad54, a protein known to be involved in the

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 paring, and stimulate DNA recombination. Alternative splicing results in multiple transcript variants encoding the same protein.[provided by RefSeq, Dec 2008]



Product images:

Donor Vector Edited Chromosome



RFP, Luc, and mBFP will be under native gene promoter