

Product datasheet for **KN211013**

B Raf (BRAF) 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: B Raf
Locus ID: 673
Components: **KN211013G1**, B Raf gRNA vector 1 in pCas-Guide CRISPR vector (GE100002), Target Sequence: GGGCCAGGCTCTGTTCAACG
KN211013G2, B Raf gRNA vector 2 in pCas-Guide CRISPR vector (GE100002), Target Sequence: TGTCCCCGTTGAACAGAGCC
KN211013D, donor DNA containing left and right homologous arms and GFP-puro functional cassette.

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
CATCCGTAAG ATGCTTTTCT GTGACTGGTG AGTACTCAAC CAAGTCATTC TGAGAATAGT GTATGCCGGC
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TTCAGCTCCG GTTCCCAACG ATC

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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_004333](#), [NM_001354609](#), [NR_148928](#)

UniProt ID:

[P15056](#)

Synonyms:

B-raf; B-RAF1; BRAF1; NS7; RAFB1

Summary:

This gene encodes a protein belonging to the RAF family of serine/threonine protein kinases. This protein plays a role in regulating the MAP kinase/ERK signaling pathway, which affects cell division, differentiation, and secretion. Mutations in this gene, most commonly the V600E mutation, are the most frequently identified cancer-causing mutations in melanoma, and have been identified in various other cancers as well, including non-Hodgkin lymphoma, colorectal cancer, thyroid carcinoma, non-small cell lung carcinoma, hairy cell leukemia and adenocarcinoma of lung. Mutations in this gene are also associated with cardiofaciocutaneous, Noonan, and Costello syndromes, which exhibit overlapping phenotypes. A pseudogene of this gene has been identified on the X chromosome. [provided by RefSeq, Aug 2017]

Product images:

