

## **Product datasheet for KN211013RB**

#### 9620 Medical Center Drive, Ste 200 Rockville, MD 20850, US Phone: +1-888-267-4436 https://www.origene.com

OriGene Technologies, Inc.

https://www.origene.com techsupport@origene.com EU: info-de@origene.com CN: techsupport@origene.cn

# B Raf (BRAF) Human Gene Knockout Kit (CRISPR)

**Product data:** 

**Product Type:** Knockout Kits (CRISPR)

**Format:** 2 gRNA vectors, 1 RFP-BSD donor, 1 scramble control

Donor DNA:RFP-BSDSymbol:B RafLocus ID:673

**Components: KN211013G1**, B Raf gRNA vector 1 in pCas-Guide CRISPR vector (GE100002)

KN211013G2, B Raf gRNA vector 2 in pCas-Guide CRISPR vector (GE100002)

KN211013RBD, donor DNA containing left and right homologous arms and RFP-BSD

functional cassette.

GE100003, scramble sequence in pCas-Guide vector

RefSeq: <u>NM 004333, NM 001354609, NR 148928</u>

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:**

### Donor Vector Edited Chromosome



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