

### **Product datasheet for RC211013L2**

# Rockville, MD 20850, US Phone: +1-888-267-4436 https://www.origene.com

**OriGene Technologies, Inc.** 9620 Medical Center Drive, Ste 200

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

## B Raf (BRAF) (NM\_004333) Human Tagged Lenti ORF Clone

#### **Product data:**

**Product Type:** Expression Plasmids

Product Name: B Raf (BRAF) (NM 004333) Human Tagged Lenti ORF Clone

Tag: mGFP Symbol: B Raf

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

Mammalian Cell None

Selection:

**Vector:** pLenti-C-mGFP (PS100071)

E. coli Selection: Chloramphenicol (34 ug/mL)

ORF Nucleotide The ORF insert of this clone is exactly the same as(RC211013).

Sequence:

**Restriction Sites:** Sgfl-Mlul

Cloning Scheme:



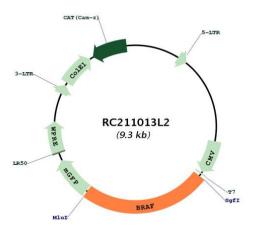


<sup>\*</sup> The last codon before the Stop codon of the ORF.





#### Plasmid Map:



**ACCN:** NM\_004333 **ORF Size:** 2298 bp

**OTI Disclaimer:** 

Due to the inherent nature of this plasmid, standard methods to replicate additional amounts of DNA in E. coli are highly likely to result in mutations and/or rearrangements. Therefore, OriGene does not guarantee the capability to replicate this plasmid DNA. Additional amounts of DNA can be purchased from OriGene with batch-specific, full-sequence verification at a reduced cost. Please contact our customer care team at <a href="mailto:custsupport@origene.com">custsupport@origene.com</a> or by calling 301.340.3188 option 3 for pricing and delivery.

The molecular sequence of this clone aligns with the gene accession number as a point of reference only. However, individual transcript sequences of the same gene can differ through naturally occurring variations (e.g. polymorphisms), each with its own valid existence. This clone is substantially in agreement with the reference, but a complete review of all prevailing variants is recommended prior to use. <u>More info</u>

OTI Annotation:

This clone was engineered to express the complete ORF with an expression tag. Expression

varies depending on the nature of the gene.

Components:

The ORF clone is ion-exchange column purified and shipped in a 2D barcoded Matrix tube containing 10ug of transfection-ready, dried plasmid DNA (reconstitute with 100 ul of water).



**Reconstitution Method:** 

- 1. Centrifuge at 5,000xg for 5min.
- 2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.
- 3. Close the tube and incubate for 10 minutes at room temperature.
- 4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom.

5. Store the suspended plasmid at -20°C. The DNA is stable for at least one year from date of

shipping when stored at -20°C.

RefSeq: <u>NM 004333.3</u>

RefSeq Size: 2949 bp
RefSeq ORF: 2301 bp
Locus ID: 673
UniProt ID: P15056

Cytogenetics: 7q34

**Domains:** pkinase, TyrKc, DAG\_PE-bind, S\_TKc, RBD

**Protein Families:** Druggable Genome, Protein Kinase

**Protein Pathways:** Acute myeloid leukemia, Bladder cancer, Chemokine signaling pathway, Chronic myeloid

leukemia, Colorectal cancer, Endometrial cancer, ErbB signaling pathway, Focal adhesion, Glioma, Insulin signaling pathway, Long-term depression, Long-term potentiation, MAPK signaling pathway, Melanoma, mTOR signaling pathway, Natural killer cell mediated cytotoxicity, Neurotrophin signaling pathway, Non-small cell lung cancer, Pancreatic cancer, Pathways in cancer, Progesterone-mediated oocyte maturation, Prostate cancer, Regulation

of actin cytoskeleton, Renal cell carcinoma, Thyroid cancer, Vascular smooth muscle

contraction

**MW:** 84.4 kDa

**Gene 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]