

### Product datasheet for RC201958L3

### OriGene Technologies, Inc.

9620 Medical Center Drive, Ste 200 Rockville, MD 20850, US Phone: +1-888-267-4436 https://www.origene.com techsupport@origene.com EU: info-de@origene.com CN: techsupport@origene.cn

## KRAS (NM\_004985) Human Tagged Lenti ORF Clone

**Product data:** 

**Product Type:** Expression Plasmids

Product Name: KRAS (NM\_004985) Human Tagged Lenti ORF Clone

Tag: Myc-DDK
Symbol: KRAS

Synonyms: C-K-RAS; c-Ki-ras2; CFC2; K-Ras; K-RAS2A; K-RAS2B; K-RAS4B; KI-RAS; KRAS1; KRAS2;

NS; NS3; RALD; RASK2

Mammalian Cell

Selection:

Puromycin

**Vector:** pLenti-C-Myc-DDK-P2A-Puro (PS100092)

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

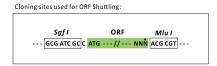
**ORF Nucleotide** 

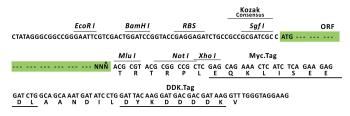
The ORF insert of this clone is exactly the same as(RC201958).

Sequence:

**Restriction Sites:** Sgfl-Mlul

**Cloning Scheme:** 





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

**ACCN:** NM 004985

ORF Size: 564 bp



#### KRAS (NM\_004985) Human Tagged Lenti ORF Clone - RC201958L3

**OTI Disclaimer:** 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. More info

**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.

ras, RAS, RHO, RAB

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 004985.3</u>

 RefSeq Size:
 5312 bp

 RefSeq ORF:
 567 bp

 Locus ID:
 3845

 UniProt ID:
 P01116

Cytogenetics: 12p12.1

Domains:

**Protein Families:** Druggable Genome

**Protein Pathways:** Acute myeloid leukemia, Axon guidance, B cell receptor signaling pathway, Bladder cancer,

Chemokine signaling pathway, Chronic myeloid leukemia, Colorectal cancer, Dorso-ventral axis formation, Endometrial cancer, ErbB signaling pathway, Fc epsilon RI signaling pathway, Insuling pathway, Long torm

Gap junction, Glioma, GnRH signaling pathway, Insulin signaling pathway, Long-term depression, Long-term potentiation, MAPK signaling pathway, Melanogenesis, Melanoma, 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, T cell receptor

signaling pathway, Thyroid cancer, Tight junction, VEGF signaling pathway

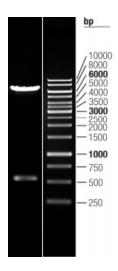
**MW:** 21.2 kDa



#### **Gene Summary:**

This gene, a Kirsten ras oncogene homolog from the mammalian ras gene family, encodes a protein that is a member of the small GTPase superfamily. A single amino acid substitution is responsible for an activating mutation. The transforming protein that results is implicated in various malignancies, including lung adenocarcinoma, mucinous adenoma, ductal carcinoma of the pancreas and colorectal carcinoma. Alternative splicing leads to variants encoding two isoforms that differ in the C-terminal region. [provided by RefSeq, Jul 2008]

# **Product images:**



Double digestion of RC201958L3 using Sgfl and Mlul  $\,$