

## Product datasheet for RC217324L4

### OriGene Technologies, Inc.

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## S6K1 (RPS6KB1) (NM\_003161) Human Tagged Lenti ORF Clone

### **Product data:**

**Product Type:** Expression Plasmids

**Product Name:** S6K1 (RPS6KB1) (NM\_003161) Human Tagged Lenti ORF Clone

Tag: mGFP Symbol: S6K1

**Synonyms:** p70 S6KA; p70(S6K)-alpha; p70-alpha; p70-S6K; PS6K; S6K-beta-1; S6K1; STK14A

Mammalian Cell Puromycin

Selection:

**Vector:** pLenti-C-mGFP-P2A-Puro (PS100093)

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

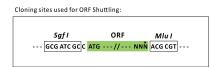
ORF Nucleotide The ORF insert of this clone is

Sequence:

The ORF insert of this clone is exactly the same as(RC217324).

**Restriction Sites:** Sgfl-Mlul

**Cloning Scheme:** 





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

**ACCN:** NM\_003161

ORF Size: 1575 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:customport@origene.com">customport@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 003161.2</u>

 RefSeq Size:
 5332 bp

 RefSeq ORF:
 1578 bp

 Locus ID:
 6198

 UniProt ID:
 P23443

Cytogenetics:

**Domains:** pkinase, S\_TK\_X, TyrKc, S\_TKc

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

17q23.1

**Protein Pathways:** Acute myeloid leukemia, ErbB signaling pathway, Fc gamma R-mediated phagocytosis, Insulin

signaling pathway, mTOR signaling pathway, TGF-beta signaling pathway

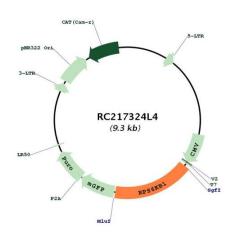
**MW:** 59 kDa



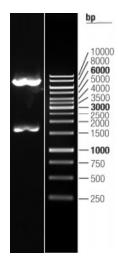
#### **Gene Summary:**

This gene encodes a member of the ribosomal S6 kinase family of serine/threonine kinases. The encoded protein responds to mTOR (mammalian target of rapamycin) signaling to promote protein synthesis, cell growth, and cell proliferation. Activity of this gene has been associated with human cancer. Alternatively spliced transcript variants have been observed. The use of alternative translation start sites results in isoforms with longer or shorter N-termini which may differ in their subcellular localizations. There are two pseudogenes for this gene on chromosome 17. [provided by RefSeq, Jan 2013]

# **Product images:**



Circular map for RC217324L4



Double digestion of RC217324L4 using Sgfl and Mlul