

## Product datasheet for RC224953L4

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OriGene Technologies, Inc.

### PRKAG2 (NM\_016203) Human Tagged Lenti ORF Clone

**Product data:** 

**Product Type:** Expression Plasmids

Product Name: PRKAG2 (NM 016203) Human Tagged Lenti ORF Clone

Tag: mGFP Symbol: PRKAG2

Synonyms: AAKG; AAKG2; CMH6; H91620p; WPWS

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 exactly the same as(RC224953).

Sequence:

**Restriction Sites:** Sgfl-Mlul

**Cloning Scheme:** 





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

**ACCN:** NM\_016203

ORF Size: 1704 bp



#### PRKAG2 (NM\_016203) Human Tagged Lenti ORF Clone - RC224953L4

**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.

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 016203.2</u>

RefSeq Size: 2062 bp
RefSeq ORF: 1710 bp
Locus ID: 51422
UniProt ID: Q9UGI0
Cytogenetics: 7q36.1

Domains: CBS

**Protein Families:** Druggable Genome

**Protein Pathways:** Adipocytokine signaling pathway, Hypertrophic cardiomyopathy (HCM), Insulin signaling

pathway

**MW:** 62.9 kDa

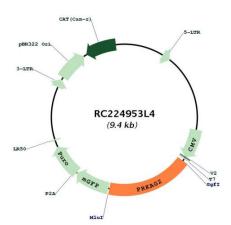
**Gene Summary:** AMP-activated protein kinase (AMPK) is a heterotrimeric protein composed of a catalytic

alpha subunit, a noncatalytic beta subunit, and a noncatalytic regulatory gamma subunit. Various forms of each of these subunits exist, encoded by different genes. AMPK is an important energy-sensing enzyme that monitors cellular energy status and functions by inactivating key enzymes involved in regulating de novo biosynthesis of fatty acid and cholesterol. This gene is a member of the AMPK gamma subunit family. Mutations in this gene have been associated with Wolff-Parkinson-White syndrome, familial hypertrophic cardiomyopathy, and glycogen storage disease of the heart. Alternate transcriptional splice variants, encoding different isoforms, have been characterized. [provided by RefSeq, Jan

2015]



# **Product images:**



Circular map for RC224953L4