

## Product datasheet for RC220376L3V

## OriGene Technologies, Inc.

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## PKA R2 (PRKAR2A) (NM\_004157) Human Tagged ORF Clone Lentiviral Particle

**Product data:** 

**Product Type:** Lentiviral Particles

**Product Name:** PKA R2 (PRKAR2A) (NM\_004157) Human Tagged ORF Clone Lentiviral Particle

Symbol: PKA R2

**Synonyms:** PKR2; PRKAR2

Mammalian Cell

Puromycin

Selection:

Vector:

pLenti-C-Myc-DDK-P2A-Puro (PS100092)

 Tag:
 Myc-DDK

 ACCN:
 NM\_004157

ORF Size: 1212 bp

**ORF Nucleotide** 

The ORF insert of this clone is exactly the same as(RC220376).

Sequence:

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.

RefSeq: <u>NM 004157.2</u>

 RefSeq Size:
 2381 bp

 RefSeq ORF:
 1215 bp

 Locus ID:
 5576

 UniProt ID:
 P13861

Cytogenetics: 3p21.31

Domains: cNMP, Rlla

**Protein Families:** Druggable Genome





**Protein Pathways:** Apoptosis, Insulin signaling pathway

MW: 45.3 kDa

**Gene Summary:** cAMP is a signaling molecule important for a variety of cellular functions. cAMP exerts its

effects by activating the cAMP-dependent protein kinase, which transduces the signal through phosphorylation of different target proteins. The inactive kinase holoenzyme is a tetramer composed of two regulatory and two catalytic subunits. cAMP causes the dissociation of the inactive holoenzyme into a dimer of regulatory subunits bound to four cAMP and two free monomeric catalytic subunits. Four different regulatory subunits and three catalytic subunits have been identified in humans. The protein encoded by this gene is one of the regulatory subunits. This subunit can be phosphorylated by the activated catalytic subunit. It may interact with various A-kinase anchoring proteins and determine the subcellular localization of cAMP-dependent protein kinase. This subunit has been shown to regulate protein transport from endosomes to the Golgi apparatus and further to the endoplasmic reticulum

(ER). [provided by RefSeq, Jul 2008]