

## OriGene Technologies, Inc.

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## Product datasheet for RC220376L4V

## 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 Selection:	Puromycin
Vector:	pLenti-C-mGFP-P2A-Puro (PS100093)
Tag:	mGFP
ACCN:	NM_004157
ORF Size:	1212 bp
ORF Nucleotide Sequence:	The ORF insert of this clone is exactly the same as(RC220376).
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. <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.
RefSeq:	<u>NM 004157.2</u>
RefSeq Size:	2381 bp
RefSeq ORF:	1215 bp
Locus ID:	5576
UniProt ID:	<u>P13861</u>
Cytogenetics:	3p21.31
Domains:	cNMP, RIIa
Protein Families:	Druggable Genome



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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]

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