

Product datasheet for **RC210332L1V**

PRKACA (NM_002730) Human Tagged ORF Clone Lentiviral Particle

Product data:

Product Type:	Lentiviral Particles
Product Name:	PRKACA (NM_002730) Human Tagged ORF Clone Lentiviral Particle
Symbol:	PRKACA
Synonyms:	CAFD1; PKACA; PPNAD4
Mammalian Cell Selection:	None
Vector:	pLenti-C-Myc-DDK (PS100064)
Tag:	Myc-DDK
ACCN:	NM_002730
ORF Size:	1053 bp
ORF Nucleotide Sequence:	The ORF insert of this clone is exactly the same as(RC210332).
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:	NM_002730.3
RefSeq Size:	2689 bp
RefSeq ORF:	1056 bp
Locus ID:	5566
UniProt ID:	P17612
Cytogenetics:	19p13.12
Domains:	ptkase, S_TK_X, TyrKc, S_TKc
Protein Families:	Druggable Genome, Protein Kinase



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Protein Pathways: Apoptosis, Calcium signaling pathway, Chemokine signaling pathway, Dilated cardiomyopathy, Gap junction, GnRH signaling pathway, Hedgehog signaling pathway, Insulin signaling pathway, Long-term potentiation, MAPK signaling pathway, Melanogenesis, Olfactory transduction, Oocyte meiosis, Prion diseases, Progesterone-mediated oocyte maturation, Taste transduction, Vascular smooth muscle contraction, Vibrio cholerae infection, Wnt signaling pathway

MW: 40.4 kDa

Gene Summary: This gene encodes one of the catalytic subunits of protein kinase A, which exists as a tetrameric holoenzyme with two regulatory subunits and two catalytic subunits, in its inactive form. 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. cAMP-dependent phosphorylation of proteins by protein kinase A is important to many cellular processes, including differentiation, proliferation, and apoptosis. Constitutive activation of this gene caused either by somatic mutations, or genomic duplications of regions that include this gene, have been associated with hyperplasias and adenomas of the adrenal cortex and are linked to corticotropin-independent Cushing's syndrome. Alternative splicing results in multiple transcript variants encoding different isoforms. Tissue-specific isoforms that differ at the N-terminus have been described, and these isoforms may differ in the post-translational modifications that occur at the N-terminus of some isoforms. [provided by RefSeq, Jan 2015]