OriGene Technologies, Inc.
9620 Medical Center Drive, Ste 200
Rockville, MD 20850, US
Phone: +1-888-267-4436
https://www.origene.com
techsupport@origene.com
EU: info-de@origene.com
CN: techsupport@origene.cn

Product datasheet for SC128044

PKA R2 (PRKAR2A) (NM_004157) Human Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	PKA R2 (PRKAR2A) (NM_004157) Human Untagged Clone
Tag:	Tag Free
Symbol:	PKA R2
Synonyms:	PKR2; PRKAR2
Mammalian Cell Selection:	None
Vector:	pCMV6-XL5
E. coli Selection:	Ampicillin (100 ug/mL)

Fully Sequenced ORF:

>OriGene ORF within SC128044 sequence for NM_004157 edited (data generated by NextGen Sequencing)

ATGAGCCACATCCAGATCCCGCCGGGGCTCACGGAGCTGCTGCAGGGCTACACGGTGGAG
GTGCTGCGACAGCAGCCGCCTGACCTCGTCGAATTCGCAGTGGAGTACTTCACCCGCCTG
CGCGAGGCCCGCGCCCCAGCCTCAGTCCTGCCCGCCGCCACCCCACGCCAGAGCCTGGGC
CACCCCCCGCCAGAACCCGGCCCGGACCGTGTCGCCGACGCCAAAGGGGACAGCGAGTCG
GAGGAGGACGAGGACTTGGAAGTTCCAGTTCCTAGCAGATTTAATAGACGAGTATCAGTC
TGTGCTGAGACCTATAACCCTGATGAGGAAGAGGAAGATACAGATCCAAGGGTGATTCAT
CCTAAAACTGATGAACAGAGATGCAGACTTCAGGAAGCTTGCAAAGATATTCTCCTTTTC
AAAAATCTTGATCAGGAACAGCTTTCTCAAGTTCTCGATGCCATGTTTGAAAGGATAGTC
AAAGCTGATGAGCATGTCATTGACCAAGGAGATGATGGAGACAACTTTTATGTCATAGAA
CGGGGAACTTATGACATTTTAGTAACAAAAGATAATCAAACCCGCTCTGTTGGTCAATAT
GACAACCGTGGCAGTTTTGGAGAACTAGCTCTGATGTACAACACCCCGAGAGCTGCTACC
ATTGTTGCTACCTCAGAAGGCTCCCTTTGGGGACTGGACCGGGTGACTTTTAGAAGAATC
ATAGTGAAAAATAATGCAAAGAAGAGGAAGATGTTTGAATCATTTATTGAGTCTGTGCCC
CTCCTTAAATCACTAGAGGTGTCAGAACGAATGGAGATTGTGGATGTAATAGGAGAGAAG
ATCTATAAGGATGGAGAACGCATAATCACTCAGGGTGAAAAGGCTGATAGCTTTTACATC
ATAGAGTCTGGCGAAGTGAGCATCTTGATTAGAAGCAGGACTAAATCAAACAAGGATGGT
GGGAACCAGGAGGTCGAGATTGCCCGCTGCCATAAGGGGCAGTACTTTGGAGAGCTTGCC
CTGGTCACCAACAAACCCAGAGCTGCCTCAGCTTATGCAGTTGGAGATGTCAAATGCTTA
GTTATGGATGTACAAGCATTCGAGAGGCTTCTGGGGCCCTGCATGGACATCATGAAGAGG
AACATCTCACACTATGAGGAACAGCTGGTGAAGATGTTTGGCTCCAGCGTGGATCTGGGC
AACCTCGGGCAGTAG

Clone variation with respect to NM_004157.2
814 a=>g

View online »

Restriction Sites:	Please inquire
ACCN:	NM_004157
Insert Size:	3000 bp
OTI Disclaimer:	Our molecular clone sequence data has been matched to the reference identifier above as a point of reference. Note that the complete sequence of our molecular clones may differ from the sequence published for this corresponding reference, e.g., by representing an alternative RNA splicing form or single nucleotide polymorphism (SNP).
OTI Annotation:	A TrueClone.
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:	NM_004157.2, NP_004148.1
RefSeq Size:	2381 bp
RefSeq ORF:	1215 bp
Locus ID:	5576
UniProt ID:	P13861
Cytogenetics:	3p21.31
Domains:	cNMP, RIIa
Protein Families:	Druggable Genome
Protein Pathways:	Apoptosis, Insulin signaling pathway

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]