

Product datasheet for MC227158

Prkaca (NM_001277898) Mouse Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Prkaca (NM_001277898) Mouse Untagged Clone
Tag:	Tag Free
Symbol:	Prkaca
Synonyms:	C; P; Pk; Pkaca; PKCD
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
Fully Sequenced ORF:	>MC227158 representing NM_001277898 Red=Cloning site Blue=ORF Orange=Stop codon

TTTGTAAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGATCGC**C

ATGGCTTCCAGCTCCAACGATGTGAAAGAGTTCCTAGCCAAAGCCAAGGAAGATTTCCTGAAAAATGGG
 AGACCCCTTCTCAGAATACAGCCAGTTGGATCAGTTTGATAGAATCAAGACCCTTGGCACC GGCTCCTT
 TGGGCGAGTGATGCTGGTGAAGCACAAGGAGAGTGGGAACCACTACGCCATGAAGATCTTAGACAAGCAG
 AAGGTGGTGAAGCTAAAGCAGATCGAGCAGCTCTGAATGAGAAGCGCATCCTGCAGGCCGTCAACTTCC
 CGTTCCTGGTCAAACCTGAATTCTCTCAAGGACAACCTCAAACCTGTACATGGTCATGGAGTATGTAGC
 TGGTGGCGAGATGTTCTCCACCTACGGCGGATTGGAAGGTTGAGCGAGCCCATGCCCGTTTCTACGCG
 GCGCAGATCGTCCTGACCTTTGAGTATCTGCACTCCCTGGACCTCATCTACCGGGACCTGAAGCCCGAGA
 ATCTTCTCATCGACCAGCAGGGCTATATTCAGGTGACAGACTTCGGTTTTGCCAAGCGTGTGAAAGGCCG
 TACTTGGACCTTGTGTGGGACCCCTGAGTACTTGGCCCCGAGATTATCCTGAGCAAAGGCTACAACAAG
 GCTGTGGACTGGTGGGCTCTCGGAGTCTCATCTACGAGATGGCTGCTGGTTACCCACCTTCTTCGCTG
 ACCAGCCTATCCAGATCTATGAGAAAATCGTCTCTGGGAAGGTGCGGTTCCCATCCCACTTCAGCTCTGA
 CTTGAAGGACCTGCTGCGGAACCTTCTGCAGGTGGATCTCACCAAGCGCTTTGGGAACCTCAAGAACGGG
 GTCAATGACATCAAGAACCACAAGTGGTTTGCCACGACTGACTGGATTGCCATCTATCAGAGAAAGGTGG
 AAGCTCCCTTCATACCAAAGTTTAAAGGCCCTGGGGACACGAGTAACCTTGACGACTATGAGGAGGAAGA
 GATCCGGGTCTCCATCAATGAGAAGTGTGGCAAGGAGTTTACTGAGTTT**TAG**

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Restriction Sites: SgfI-MluI



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ACCN:	NM_001277898
Insert Size:	1032 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:	Clone contains native stop codon, and expresses the complete ORF without any c-terminal tag.
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:	<ol style="list-style-type: none"> 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.
Note:	Plasmids are not sterile. For experiments where strict sterility is required, filtration with 0.22um filter is required.
RefSeq:	<u>NM_001277898.1, NP_001264827.1</u>
RefSeq Size:	2257 bp
RefSeq ORF:	1032 bp
Locus ID:	18747
UniProt ID:	<u>P05132</u>
Cytogenetics:	8 C2

Gene Summary:

This gene encodes a member of the serine/threonine protein kinase family. The holoenzyme, protein kinase A (also known as cyclic-AMP dependent protein kinase), mediates cellular response to changes in cyclic-AMP levels. This gene encodes the alpha catalytic subunit of protein kinase A. Protein kinase A-mediated signaling is transduced via phosphorylation of target proteins, and is important for many cellular functions, including mammalian sperm maturation and motility. Alternative splicing results in multiple transcript variants. A pseudogene of this gene has been defined on the X chromosome. [provided by RefSeq, Apr 2013]

Transcript Variant: This variant (2, also known as Cs and Calpha2) contains an alternate 5'-most exon and initiates translation at an alternate start codon, compared to variant 1. The encoded isoform (2) has a distinct and shorter N-terminus, compared to isoform 1. This variant is testis-specific and the encoded isoform does not contain the myristylation signal found in isoform 1 (PMID: 10841548 and PMID: 10982398). There are no publicly available full-length transcripts for this variant, but it is supported by publication data, including PMID: 10982398.