Recombinant Human PRKACA Protein, Myc/DDK-tagged, C13 and N15-labeled

Cat. No. PRKACA-1917H **Lot. No.** (See product label)

SPECIFICATION

Product Overview	PRKACA MS Standard C13 and N15-labeled recombinant protein (NP_002721) with a C-terminal MYC/DDK tag, was expressed in HEK293 cells.
Species	Human
Source	HEK293
Description	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.
Molecular Mass	40.4 kDa

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AA Sequence	MGNAAAAKKGSEQESVKEFLAKAKEDFLKKWESPAQNTAHLDQFERIKTLGTGSFG RVMLVKHKETGNHYAMKILDKQKVVKLKQIEHTLNEKRILQAVNFPFLVKLEFSFKDN SNLYMVMEYVPGGEMFSHLRRIGRFSEPHARFYAAQIVLTFEYLHSLDLIYRDLKPE NLLIDQQGYIQVTDFGFAKRVKGRTWTLCGTPEYLAPEIILSKGYNKAVDWWALGVLI YEMAAGYPPFFADQPIQIYEKIVSGKVRFPSHFSSDLKDLLRNLLQVDLTKRFGNLKN GVNDIKNHKWFATTDWIAIYQRKVEAPFIPKFKGPGDTSNFDDYEEEEIRVSINEKCG KEFSEFTRTRPLEQKLISEEDLAANDILDYKDDDDKV
Purity	> 80% as determined by SDS-PAGE and Coomassie blue staining
Stability	Stable for 3 months from receipt of products under proper storage and handling conditions.
Storage	Store at -80 centigrade. Avoid repeated freeze-thaw cycles.
Concentration	50 μg/mL as determined by BCA
Storage Buffer	100 mM glycine, 25 mM Tris-HCl, pH 7.3.

GENE INFORMATION

Gene Name	PRKACA protein kinase cAMP-activated catalytic subunit alpha [Homo sapiens (human)]
Official Symbol	PRKACA
Synonyms	PRKACA; protein kinase, cAMP-dependent, catalytic, alpha; cAMP-dependent protein kinase catalytic subunit alpha; PKACa; PKA C-alpha; protein kinase A catalytic subunit; cAMP-dependent protein kinase catalytic subunit alpha, isoform 1; PKACA; MGC48865; MGC102831;

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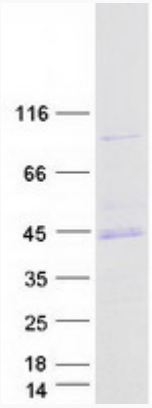
Gene ID	5566
mRNA Refseq	NM_002730
Protein Refseq	NP_002721
MIM	601639
UniProt ID	P17612
SDS-PAGE	

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