

Recombinant Human Protein Kinase, CAMP-Dependent, Regulatory, Type I, Beta, His-tagged

Cat. No. PRKAR1B-4872H Lot. No. (See product label)

SPECIFICATION

Product Overview	Recombinant full-length human PRKAR1B was expressed in Sf9 insect cells using a C-terminal His tag.
Species	Human
Source	Sf9 Cells
Description	PRKAR1B is the type I-beta regulatory subunit of cyclic AMP-dependent protein kinase A (PKA) which is an essential enzyme in the cAMP signaling pathway. PKA holoenzyme is composed of 2 regulatory and 2 catalytic subunits and dissociates from the regulatory subunits upon binding of cAMP. PKA controls many biochemical events in the cell including regulation of metabolism, ion transport, and gene transcription. PKA undergoes a dramatic conformational change upon complex formation with the catalytic subunit.
Applications	Western Blot
Molecular Weight	52 kDa
Expression System	Sf9 insect cells using baculovirus
Form	Recombinant protein stored in 50 mM sodium phosphate, pH 7.0, 300 mM NaCl, 150 mM imidazole, 0.1 mM PMSF, 0.25 mM DTT, 25% glycerol.

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Specific Activity	871 nmol/min/mg
Purity	> 90 %
Concentration	0.2 ug/ul
Storage	Store product at -70oC. For optimal storage, aliquot target into smaller quantities after centrifugation and store at recommended temperature. For most favorable performance, avoid repeated handling and multiple freeze/thaw cycles.
Pathways	Apoptosis; Aquaporin-mediated transport; Ca-dependent events; CaM pathway; Calmodulin induced events; DARPP-32 events; Diabetes pathways; EGFR1 Signaling Pathway; G Protein Signaling Pathways; G-protein mediated events; Hemostasis; Insulin signaling pathway; Integration of energy metabolism; Opioid Signalling; PKA activation; PKA activation in glucagon signalling; PLC beta mediated events

GENE INFORMATION

Gene Name	PRKAR1B protein kinase, cAMP-dependent, regulatory, type I, beta [Homo sapiens]
Official Symbol	PRKAR1B
Synonyms	PRKAR1B; protein kinase, cAMP-dependent, regulatory, type I, beta; PRKAR1; cAMP-dependent protein kinase type I-beta regulatory subunit; OTTHUMP00000199947; OTTHUMP00000199948; OTTHUMP00000199949; OTTHUMP00000199952; NP_001158230.1; EC 2.7.11.1
Gene ID	5575
mRNA Refseq	NM_001164758

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Protein Refseq	NP_001158230
MIM	176911
UniProt ID	P31321
Chromosome Location	7pter-p22
Function	cAMP binding; cAMP-dependent protein kinase regulator activity; nucleotide binding

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