

Product datasheet for **AP00040PU-N**

PRKACA Rabbit Polyclonal Antibody

Product data:

Product Type:	Primary Antibodies
Applications:	IP, WB
Recommended Dilution:	Western blot: 0.5-4 µg/ml; Jukat cell lysate can be used as a positive control. Immunoprecipitation: 20-30 µg/ml.
Reactivity:	Bovine, Human, Mouse, Porcine, Rat, Sheep
Host:	Rabbit
Clonality:	Polyclonal
Immunogen:	Synthetic peptide surrounding amino acid 11 of the catalytic subunit of PKA alpha isoform.
Specificity:	Recognizes a 40 kDa PKA on SDS-PAGE immunoblots
Formulation:	PBS, pH 7.2, containing 30 % glycerol, 0.5 % BSA, and 0.01% thimerosal State: Aff - Purified State: Liquid purified Ig
Concentration:	lot specific
Purification:	Affinity purified
Conjugation:	Unconjugated
Storage:	Store the antibody undiluted at -20°C or for long term storage (in aliquots) at -70°C. Avoid repeated freezing and thawing.
Stability:	Shelf life: one year from despatch.
Gene Name:	protein kinase cAMP-activated catalytic subunit alpha
Database Link:	Entrez Gene 5566 Human P17612



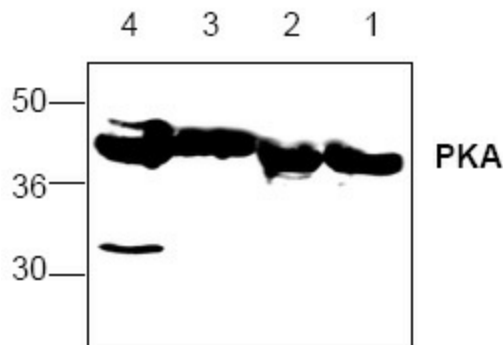
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Background:

Protein kinase A (PKA) also known as cAMP-dependent protein kinase, is a 40 kDa protein kinase that phosphorylates serine or threonine residues in target proteins in response to elevated levels of cAMP. The second messenger cAMP is produced in response to a wide variety of hormones & neurotransmitters and regulates cellular processes such as cell growth and differentiation, ion channel conductivity, synaptic release of neurotransmitters & gene transcription. The principle intracellular target for cAMP is PKA. Inactive PKA exists as a tetrameric protein composed of two regulatory (R) subunits and two catalytic (C) subunits. Activation occurs when two cAMP molecules bind to each R subunit which causes a conformational change that releases the active C subunits. Two major PKA isozymes, type I (PKAI) and type II (PKAII) consist of RI and RII respectively, complexed with C. Three different C subunits (alpha, beta, and gamma) and four different R subunits (RI-alpha, RI-beta, RII-alpha, and RII-beta) have been identified. It has been suggested that the complex structure of PKA may be necessary for it to accomplish such diverse functions.

Synonyms:

PKA C-alpha

Product images:

Western blot analysis of PKA expression in lysates from Jurkat cells (Lane 1 & 2), mouse small intestine (Lane 3) and rat kidney (Lane 4).