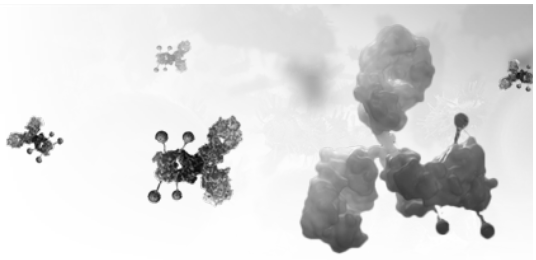

Anti-PRKAR1A (aa 1-100) polyclonal antibody (DPAB-DC2430)

This product is for research use only and is not intended for diagnostic use.

PRODUCT INFORMATION

Antigen Description	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. This gene encodes one of the regulatory subunits. This protein was found to be a tissue-specific extinguisher that down-regulates the expression of seven liver genes in hepatoma x fibroblast hybrids. Mutations in this gene cause Carney complex (CNC). This gene can fuse to the RET protooncogene by gene rearrangement and form the thyroid tumor-specific chimeric oncogene known as PTC2. A nonconventional nuclear localization sequence (NLS) has been found for this protein which suggests a role in DNA replication via the protein serving as a nuclear transport protein for the second subunit of the Replication Factor C (RFC40). Several alternatively spliced transcript variants encoding two different isoforms have been observed.
Immunogen	PRKAR1A (AAH36285, 1 a.a. ~ 100 a.a) partial recombinant protein with GST tag. The sequence is MESGSTAASEEARSLRECELYVQKHNIQALLKDSIVQLCTARPERPMAFLREYFERLEKEEAKQIQNLQKAGTRTDSREDEISPPPPNPVVKGRRRRGAI
Source/Host	Mouse
Species Reactivity	Human
Conjugate	Unconjugated
Applications	WB (Recombinant protein), ELISA,
Size	50 µl

45-1 Ramsey Road, Shirley, NY 11967, USA
Email: info@creative-diagnostics.com
Tel: 1-631-624-4882 Fax: 1-631-938-8221

Buffer	50 % glycerol
Preservative	None
Storage	Store at -20°C or lower. Aliquot to avoid repeated freezing and thawing.

GENE INFORMATION

Gene Name	PRKAR1A protein kinase, cAMP-dependent, regulatory, type I, alpha [Homo sapiens (human)]
Official Symbol	PRKAR1A
Synonyms	PRKAR1A; protein kinase, cAMP-dependent, regulatory, type I, alpha; CAR; CNC; CNC1; PKR1; TSE1; ADOHR; PPNAD1; PRKAR1; ACRDYS1; cAMP-dependent protein kinase type I-alpha regulatory subunit; Carney complex type 1; tissue-specific extinguisher 1; protein kinase A type 1a regulatory subunit; cAMP-dependent protein kinase regulatory subunit RIalpha; cAMP-dependent protein kinase type I-alpha regulatory chain;
Entrez Gene ID	5573
Protein Refseq	NP_001263218
UniProt ID	B2R5T5
Chromosome Location	17q24.2
Pathway	Apoptosis; Ca-dependent events; Calcium Regulation in the Cardiac Cell; DAG and IP3 signaling
Function	cAMP binding; cAMP-dependent protein kinase inhibitor activity; cAMP-dependent protein kinase regulator activity; protein binding

45-1 Ramsey Road, Shirley, NY 11967, USA
Email: info@creative-diagnostics.com
Tel: 1-631-624-4882 Fax: 1-631-938-8221