

PRKAR1A rabbit monoclonal antibody

Catalog # H00005573-K Size 100 ug x up to 3

Specification

Product Description	Rabbit monoclonal antibody raised against a human PRKAR1A peptide using ARM Technology.
Immunogen	A synthetic peptide of human PRKAR1A is used for rabbit immunization. Customer or Abnova will decide on the preferred peptide sequence.
Host	Rabbit
Library Construction	Non-fusion antibody library from rabbit spleen (ARM Technology).
Expression	Overexpression vector and transfection into 293H cell line.
Reactivity	Human
Purification	Protein A
Isotype	IgG
Quality Control Testing	Antibody reactive against human PRKAR1A peptide by ELISA and mammalian transfected lysate by Western Blot.
Storage Buffer	In 1x PBS, pH 7.4
Storage Instruction	Store at -20°C or lower. Aliquot to avoid repeated freezing and thawing.
Deliverable	Up to three rabbit IgG clones of 100 ug each will be delivered to customer.
Note	1. Customer may provide cell or tissue lysate for antibody screening. 2. Rabbit monoclonal antibody generated by ARM technology is amenable to antibody engineering including F(ab) ₂ , IgG, scFv and different Fc and non-Fc conjugates per customer request.

Applications

- Western Blot (Transfected lysate)

[Protocol Download](#)

- ELISA

Gene Info — PRKAR1A

Entrez GeneID	5573
GeneBank Accession#	PRKAR1A
Gene Name	PRKAR1A
Gene Alias	CAR, CNC, CNC1, DKFZp779L0468, MGC17251, PKR1, PPNAD1, PRKAR1, TSE1
Gene Description	protein kinase, cAMP-dependent, regulatory, type I, alpha (tissue specific extinguisher 1)
Omim ID	160980 188550 188830 255960 610489
Gene Ontology	Hyperlink
Gene Summary	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). Three alternatively spliced transcript variants encoding the same protein have been observed. [provided by RefSeq]
Other Designations	cAMP-dependent protein kinase regulatory subunit R1alpha cAMP-dependent protein kinase type I-alpha regulatory chain cAMP-dependent protein kinase, regulatory subunit alpha 1 protein kinase A type 1a regulatory subunit tissue-specific extinguisher 1

Pathway

- [Apoptosis](#)
- [Insulin signaling pathway](#)

Disease

- [Adenoma](#)
- [Adrenal Cortex Diseases](#)
- [Adrenal Cortex Neoplasms](#)
- [Cushing Syndrome](#)
- [Genetic Predisposition to Disease](#)
- [Myxoma](#)
- [Thyroid Neoplasms](#)