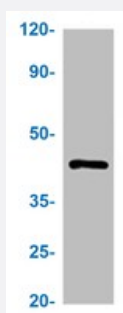


RecomAb™

PRKAR1A recombinant monoclonal antibody, clone 1C3

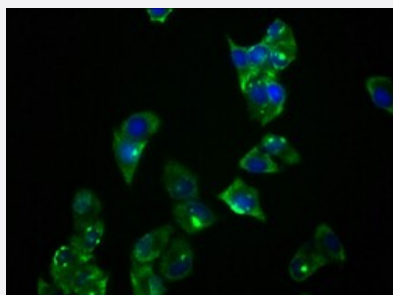
Catalog # RAB04359 Size 100 uL

Applications



Western Blot

Western blot analysis of U87 whole cell lysate with PRKAR1A recombinant monoclonal antibody, clone 1C3 (Cat # RAB04359).



Immunofluorescence

Immunofluorescent staining of HeLa cells with PRKAR1A recombinant monoclonal antibody, clone 1C3 (Cat # RAB04359) (diluted at 1:36). The secondary antibody was Alexa Fluor 488-conjugated goat anti-rabbit IgG (green). Counter-stain DAPI was used (blue).

Specification

Product Description	Rabbit recombinant monoclonal antibody raised against human PRKAR1A.
Antibody Species	Rabbit
Immunogen	Original antibody is raised against a synthetic peptide corresponding to human PRKAR1A.
Theoretical MW (kDa)	Calculated MW: 43, 3
Reactivity	Human
Form	Liquid

Purification	Affinity chromatography
Isotype	IgG
Recommend Usage	ELISA Immunofluorescence (1:20-1:200) Western Blot (1:500-1:5000) The optimal working dilution should be determined by the end user.
Storage Buffer	In PBS, pH7.4 (150mM NaCl, 50% glycerol and 0.02% sodium azide)
Storage Instruction	Store at -20 °C or -80 °C. Aliquot to avoid repeated freezing and thawing.
Note	This product contains sodium azide: a POISONOUS AND HAZARDOUS SUBSTANCE which should be handled by trained staff only.

Applications

- Western Blot

Western blot analysis of U87 whole cell lysate with PRKAR1A recombinant monoclonal antibody, clone 1C3 (Cat # RAB04359).

- Immunofluorescence

Immunofluorescent staining of Hela cells with PRKAR1A recombinant monoclonal antibody, clone 1C3 (Cat # RAB04359) (diluted at 1:36). The secondary antibody was Alexa Fluor 488-conjugated goat anti-rabbit IgG (green). Counter-stain DAPI was used (blue).

- Enzyme-linked Immunoabsorbent Assay

Gene Info — PRKAR1A

Entrez GeneID	5573
Protein Accession#	P10644
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 extingisher 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 PTC 2. 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 extingisher 1

Pathway

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

Disease

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