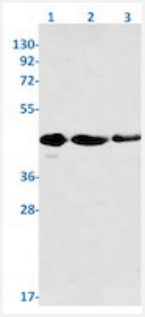
RecomAb™

PRKAR1A recombinant monoclonal antibody, clone R06-8A5

Catalog # RAB01979 Size 100 uL

Applications



Western Blot

Western blot analysis of Lane 1: C6, Lane 2: rat brain and Lane 3: Jurkat lysates with PRKAR1A recombinant monoclonal antibody, clone R06-8A5 (Cat # RAB01979).

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 kD
Reactivity	Human, Rat
Form	Liquid
Purification	Affinity purification
Isotype	IgG
Recommend Usage	Western Blot (1:500-1:1000) The optimal working dilution should be determined by the end user.
Storage Buffer	In 50 mM Tris-Glycine, pH 7.4 (0.15 M NaCl, 40% Glycerol, 0.01% Sodium azide and 0.05% BSA)

Storage Instruction	Store at -20 °C. Aliquot to avoid repeated freezing and thawing.
Note	This product contains sodium azide: a POISONOUS AND HAZARDOUS SUBSTANCE which shoul d be handled by trained staff only.

Applications

- Western Blot

Western blot analysis of Lane 1: C6, Lane 2: rat brain and Lane 3: Jurkat lysates with PRKAR1A recombinant monoclonal antibody, clone R06-8A5 (Cat # RAB01979).

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 phosphoryl ation of different target proteins. The inactive kinase holoenzyme is a tetramer composed of two r egulatory and two catalytic subunits. cAMP causes the dissociation of the inactive holoenzyme int o a dimer of regulatory subunits bound to four cAMP and two free monomeric catalytic subunits. F our 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 exting uisher 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 protooncoge ne 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 su ggests a role in DNA replication via the protein serving as a nuclear transport protein for the seco nd subunit of the Replication Factor C (RFC40). Three alternatively spliced transcript variants enc oding the same protein have been observed. [provided by RefSeq
Other Designations	cAMP-dependent protein kinase regulatory subunit RIalpha|cAMP-dependent protein kinase type I-alpha regulatory chain|cAMP-dependent protein kinase, regulatory subunit alpha 1|protein kinas e 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