

Product datasheet for **TA344577**

Protein Kinase A regulatory subunit I alpha (PRKAR1A) Rabbit Polyclonal Antibody

Product data:

Product Type:	Primary Antibodies
Applications:	WB
Recommended Dilution:	WB
Reactivity:	Human
Host:	Rabbit
Isotype:	IgG
Clonality:	Polyclonal
Immunogen:	The immunogen for anti-PRKAR1A antibody: synthetic peptide directed towards the C terminal of human PRKAR1A. Synthetic peptide located within the following region: MNRPRAATVVARGPLKCVKLDPRPRFERVLGPCSDILKRNIQQYNSFVLSL
Formulation:	Liquid. Purified antibody supplied in 1x PBS buffer with 0.09% (w/v) sodium azide and 2% sucrose. <i>Note that this product is shipped as lyophilized powder to China customers.</i>
Purification:	Affinity Purified
Conjugation:	Unconjugated
Storage:	Store at -20°C as received.
Stability:	Stable for 12 months from date of receipt.
Predicted Protein Size:	43 kDa
Gene Name:	protein kinase cAMP-dependent type I regulatory subunit alpha
Database Link:	NP_997636 Entrez Gene 5573 Human P10644



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Background:

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.

Synonyms:

ACRDYS1; ADOHR; CAR; CNC; CNC1; PKR1; PPNAD1; PRKAR1; TSE1

Note:

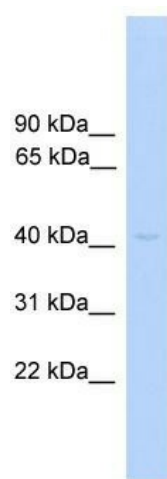
Immunogen Sequence Homology: Dog: 100%; Pig: 100%; Rat: 100%; Horse: 100%; Human: 100%; Mouse: 100%; Sheep: 100%; Bovine: 100%; Rabbit: 100%; Zebrafish: 100%; Guinea pig: 100%

Protein Families:

Druggable Genome, Transcription Factors

Protein Pathways:

Apoptosis, Insulin signaling pathway

Product images:

WB Suggested Anti-PRKAR1A Antibody Titration:
0.2-1 ug/ml; ELISA Titer: 1:62500; Positive Control:
Human Liver