

**Anti-PRKAR1A Picoband Antibody**  
**Catalog # ABO10102****Specification**

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**Anti-PRKAR1A Picoband Antibody - Product Information**

Application	WB, IHC-P
Primary Accession	<a href="#">P10644</a>
Host	Rabbit
Reactivity	Human, Rat
Clonality	Polyclonal
Format	Lyophilized

**Description**

Rabbit IgG polyclonal antibody for cAMP-dependent protein kinase type I-alpha regulatory subunit(PRKAR1A) detection. Tested with WB, IHC-P in Human;Rat.

**Reconstitution**

Add 0.2ml of distilled water will yield a concentration of 500ug/ml.

**Anti-PRKAR1A Picoband Antibody - Additional Information**

**Gene ID** 5573

**Other Names**

cAMP-dependent protein kinase type I-alpha regulatory subunit, Tissue-specific extinguisher 1, TSE1, cAMP-dependent protein kinase type I-alpha regulatory subunit, N-terminally processed, PRKAR1A, PKR1, PRKAR1, TSE1

**Calculated MW**

42982 MW KDa

**Application Details**

Immunohistochemistry(Paraffin-embedded Section), 0.5-1 µg/ml, Human, Rat, By Heat<br><br>Western blot, 0.1-0.5 µg/ml, Human, Rat<br>

**Subcellular Localization**

Cell membrane .

**Tissue Specificity**

Four types of regulatory chains are found: I- alpha, I-beta, II-alpha, and II-beta. Their expression varies among tissues and is in some cases constitutive and in others inducible.

**Protein Name**

cAMP-dependent protein kinase type I-alpha regulatory subunit

**Contents**

Each vial contains 5mg BSA, 0.9mg NaCl, 0.2mg Na2HPO4, 0.05mg NaN3.

**Immunogen**

E.coli-derived human PRKAR1A recombinant protein (Position: E2-E81). Human PRKAR1A shares

89.9% and 92.4% amino acid (aa) sequence identity with mouse and rat PRKAR1A, respectively.

**Purification**

Immunogen affinity purified.

**Cross Reactivity**

No cross reactivity with other proteins

**Storage**

**At -20°C for one year. After reconstitution, at 4°C for one month. It can also be aliquotted and stored frozen at -20°C for a longer time. Avoid repeated freezing and thawing.**

**Anti-PRKAR1A Picoband Antibody - Protein Information**

**Name** PRKAR1A

**Synonyms** PKR1, PRKAR1, TSE1

**Function**

Regulatory subunit of the cAMP-dependent protein kinases involved in cAMP signaling in cells.

**Cellular Location**

Cell membrane.

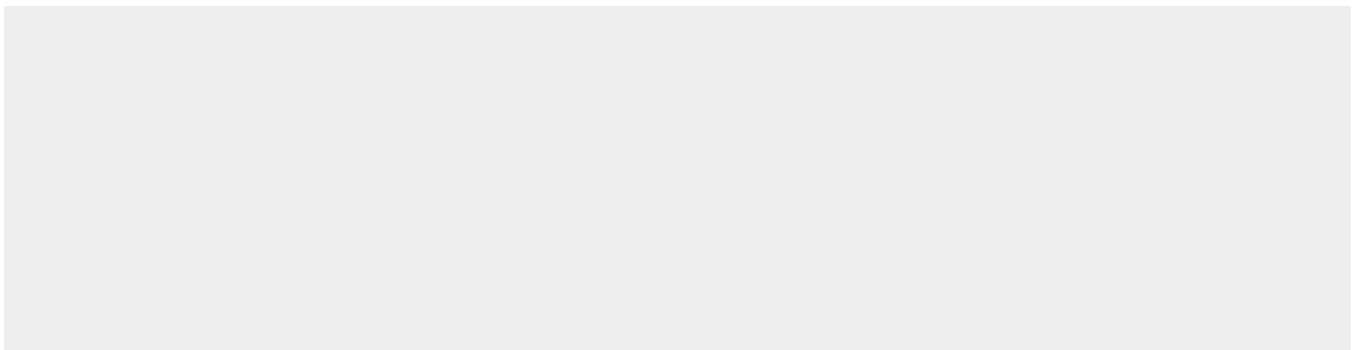
**Tissue Location**

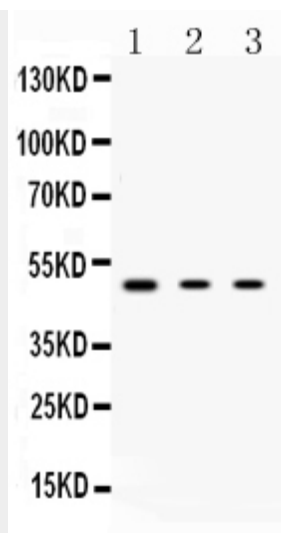
Four types of regulatory chains are found: I-alpha, I-beta, II-alpha, and II-beta. Their expression varies among tissues and is in some cases constitutive and in others inducible

**Anti-PRKAR1A Picoband Antibody - Protocols**

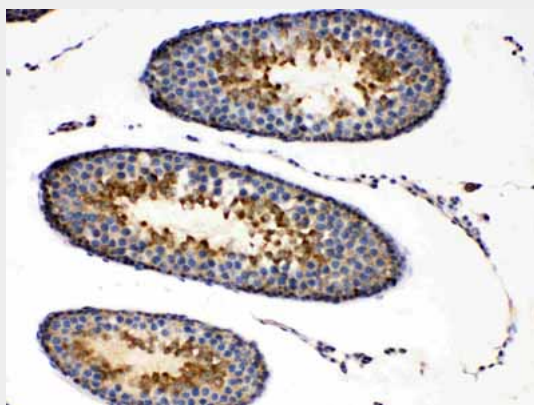
Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

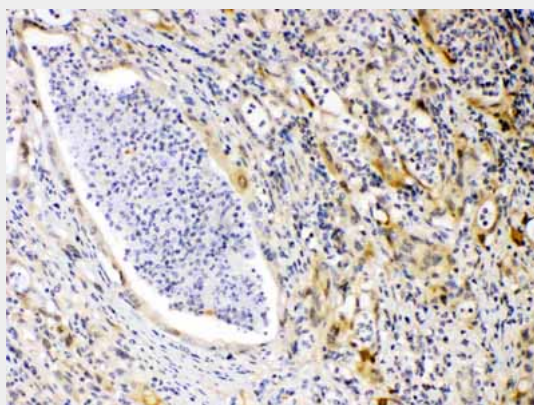
**Anti-PRKAR1A Picoband Antibody - Images**



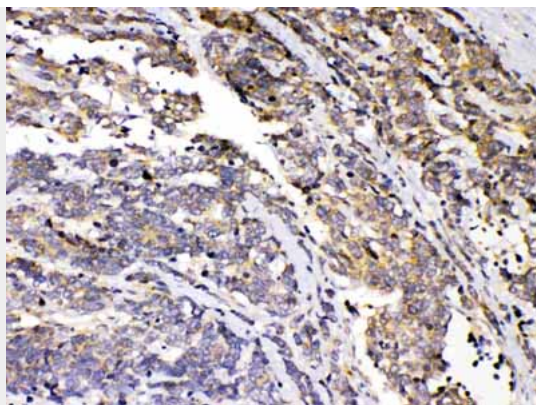
Western blot analysis of PRKAR1A expression in rat thymus extract (lane 1), HEPG-2 whole cell lysates (lane 2) and MCF-7 whole cell lysates (lane 3). PRKAR1A at 48KD was detected using rabbit anti- PRKAR1A Antigen Affinity purified polyclonal antibody (Catalog #ABO10102) at 0.5  $\mu$ g/mL. The blot was developed using chemiluminescence (ECL) method .



PRKAR1A was detected in paraffin-embedded sections of rat testis tissues using rabbit anti- PRKAR1A Antigen Affinity purified polyclonal antibody (Catalog # ABO10102) at 1  $\mu$ g/mL. The immunohistochemical section was developed using SABC method .



PRKAR1A was detected in paraffin-embedded sections of human intestinal cancer tissues using rabbit anti- PRKAR1A Antigen Affinity purified polyclonal antibody (Catalog # ABO10102) at 1  $\mu$ g/mL. The immunohistochemical section was developed using SABC method .



PRKAR1A was detected in paraffin-embedded sections of human lung cancer tissues using rabbit anti- PRKAR1A Antigen Affinity purified polyclonal antibody (Catalog # ABO10102) at 1  $\mu$ g/mL. The immunohistochemical section was developed using SABC method .

#### **Anti-PRKAR1A Picoband Antibody - Background**

cAMP-dependent protein kinase type I-alpha regulatory subunit is an enzyme that in humans is encoded by the PRKAR1A gene. This protein encoded by this gene 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.