

# Anti-PRKAR1A Picoband Antibody

Catalog # ABO10102

#### Specification

### Anti-PRKAR1A Picoband Antibody - Product Information

ApplicationWB, IHCPrimary AccessionP10644HostRabbitReactivityHuman, RatClonalityPolyclonalFormatLyophilizedDescriptionRabbit lgG polyclonal antibody for cAMP-dependent protein kinal

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><br>Western blot, 0.1-0.5 μg/ml, Human, Rat<br></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 r°Constitution, 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

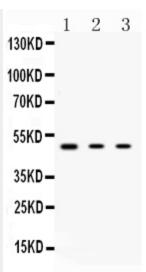
#### **Anti-PRKAR1A Picoband Antibody - Protocols**

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

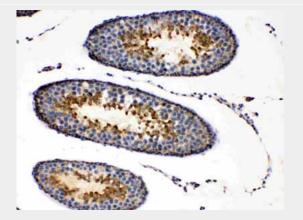
- Western Blot
- <u>Blocking Peptides</u>
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- <u>Cell Culture</u>

#### Anti-PRKAR1A Picoband Antibody - Images

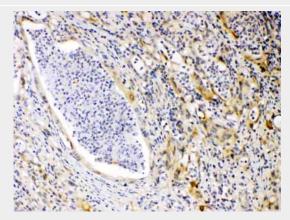




Western blot analysis of PRKAR1A expression in rat thymus extract (lane 1), HEPG-2 whole cell lysates (lane 2) and MCF-7 whole cell lysates (lane 3). PRKAR1A at 48KD was detected using rabbit anti- PRKAR1A Antigen Affinity purified polyclonal antibody (Catalog #ABO10102) at 0.5  $l^{1}_{4}$ g/mL. The blot was developed using chemiluminescence (ECL) method .

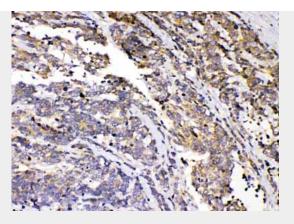


PRKAR1A was detected in paraffin-embedded sections of rat testis tissues using rabbit anti-PRKAR1A Antigen Affinity purified polyclonal antibody (Catalog # ABO10102) at 1  $\hat{l}_{4}$ g/mL. The immunohistochemical section was developed using SABC method.



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  $\hat{l}_{4}$ 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  $\hat{I}_{4}^{4}$ 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.