

Anti-PRKAR1A Picoband Antibody

Catalog # ABO10102

Product Information

Application	WB, IHC-P
Primary Accession	P10644
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.

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
Application Details	Immunohistochemistry(Paraffin-embedded Section), 0.5-1 µg/ml, Human, Rat, By Heat Western blot, 0.1-0.5 µg/ml, Human, Rat
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.
Source	Eukaryota
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.

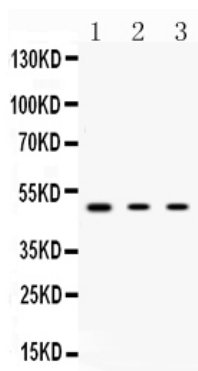
Protein Information

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

Background

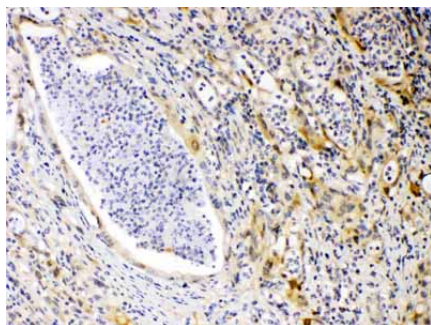
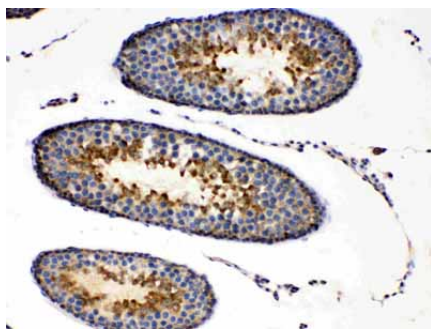
cAMP-dependent protein kinase type I-alpha regulatory subunit is an enzyme that in humans is encoded by the PRKAR1A gene. This protein encoded by this gene was found to be a tissue-specific extinguisher that down-regulates the expression of seven liver genes in hepatoma x fibroblast hybrids. Mutations 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.

Images

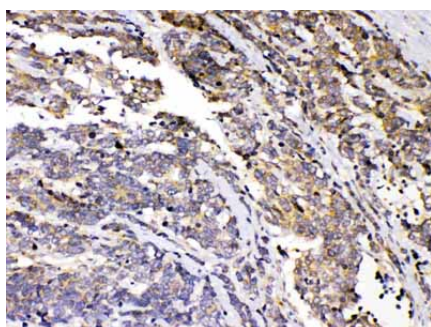


Western blot analysis of PRKAR1A expression in rat thymus extract (lane 1), HEPG-2 whole cell lysates (lane 2) and MCF-7 whole cell lysates (lane 3). PRKAR1A at 48KD was detected using rabbit anti- PRKAR1A Antigen Affinity purified polyclonal antibody (Catalog #ABO10102) at 0.5 µg/mL. The blot was developed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

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.