

Basic Information

Product Name	Anti-PRKAR1A Antibody	
Gene Name	PRKAR1A	
Source	Rabbit	
Clonality	Polyclonal	
Isotype	IgG	
Species Reactivity	human, rat	
Tested Application	WB, IHC	
Contents	500 ug/ml antibody with PBS, 0.02% NaN ₃ , 1 mg/ml BSA and 50% glycerol.	
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.	
Concentration	500 ug/ml	
Purification	Immunogen affinity purified.	
Observed MW	43 kDa	
Dilution Ratios	Western blot (WB): 1:500-2000 Immunohistochemistry (IHC): 1:50-400 (Boiling the paraffin sections in 10mM citrate buffer,pH6.0,or PH8.0 EDTA repair liquid for 20 mins is required for the staining of formalin/paraffin sections.) Optimal working dilutions must be determined by end user.	

Storage

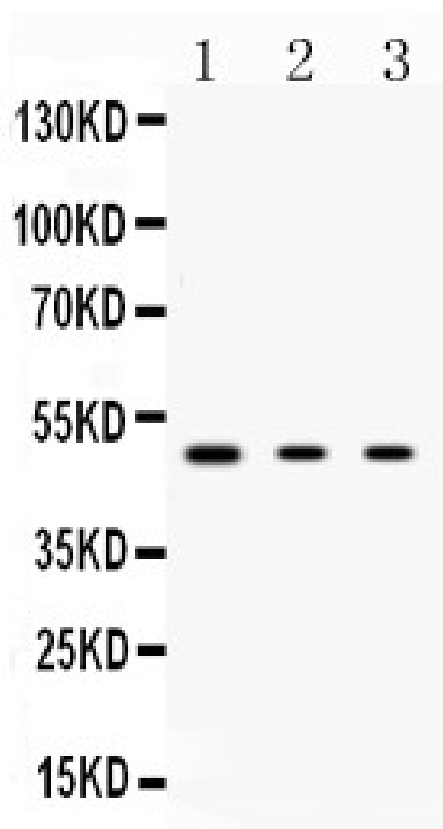
12 months from date of receipt, -20°C as supplied.

Background Information

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.

Selected Validation Data



Western blot analysis of PRKAR1A using anti-PRKAR1A antibody (A00699-1). The sample well of each lane was loaded with 30 ug of sample under reducing conditions.

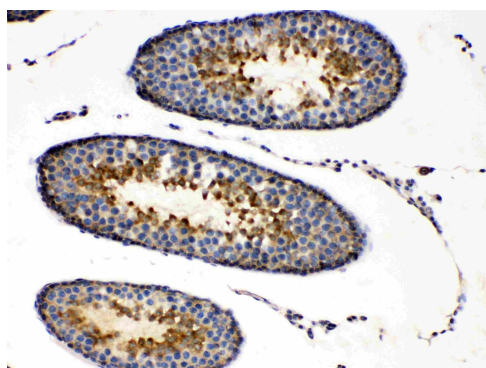
Lane 1: rat thymus tissue lysates,

Lane 2: HEPG-2 whole cell lysates,

Lane 3: MCF-7 whole cell lysates.

After electrophoresis, proteins were transferred to a membrane.

Then the membrane was incubated with rabbit anti-PRKAR1A antigen affinity purified polyclonal antibody (A00699-1) at a dilution of 1:1000 and probed with a goat anti-rabbit IgG-HRP secondary antibody (Catalog # BA1054). The signal is developed using ECL Plus Western Blotting Substrate (Catalog # AR1197). A specific band was detected for PRKAR1A at approximately 43 kDa. The expected band size for PRKAR1A is at 43 kDa.



IHC analysis of PRKAR1A using anti-PRKAR1A antibody (A00699-1).

PRKAR1A was detected in a paraffin-embedded section of rat testis tissue.

Biotinylated goat anti-rabbit IgG was used as secondary antibody.

The tissue section was incubated with rabbit anti-PRKAR1A Antibody (A00699-1) at a dilution of 1:200 and developed using

Streptavidin-Biotin-Complex (SABC) (Catalog # SA1022) with DAB (Catalog # AR1027) as the chromogen.