[KO Validated] Anti-PKA RI alpha Rabbit pAb

Purified Rabbit Polyclonal Antibody

Catalog # P100287

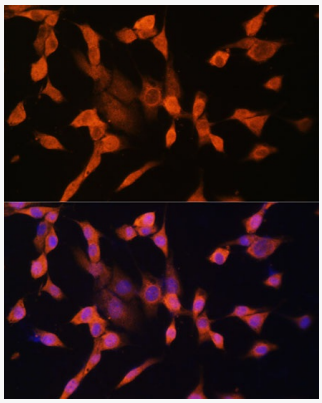
Product Information

Application	WB, IF (Cell)/ICC, ELISA
Reactivity	Human, Mouse, Rat
Dilution	WB 1:500~1:1000; IF 1:50~1:200
Host	Rabbit
Clonality	Polyclonal
Isotype	IgG
Label	Unconjugated
Immunogen	Recombinant fusion protein containing a sequence corresponding to amino acids 1-250 of human PRKAR1A (NP_002725.1).
Format	Affinity purified polyclonal antibody supplied in PBS with 0.02% sodium azide and 50% glycerol, pH 7.3.
Storage	Shipped on wet ice. Store at -20°C. Stable for 24 months from date of receipt. Aliquoting is unnecessary for -20°C storage.
Precautions	Anti-PKA RI alpha Rabbit pAb is for research use only and not for use in diagnostic or therapeutic procedures.

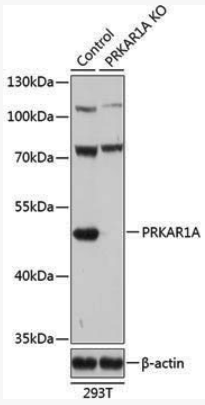
Protein Information

Synonyms	CAR; CNC; CNC1; PKR1; TSE1; ADOHR; PPNAD1; PRKAR1; ACRDYS1; PRKAR1A.
Calculated MW	Calculated MW: 43 kDa; Observed MW: 48 kDa
Uniprot ID	P10644
Gene ID	5573
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). Several alternatively spliced transcript variants encoding two different isoforms have been observed.

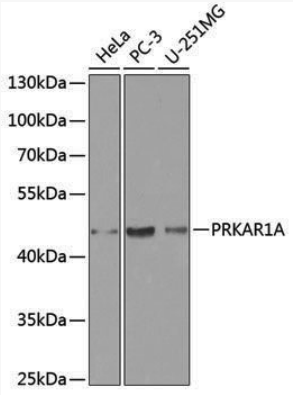
Validation Images



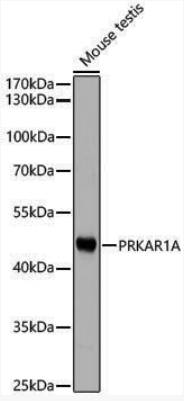
Immunofluorescence analysis of NIH/3T3 cells using PRKAR1A Rabbit pAb (P100287) at dilution of 1:100. Secondary antibody: Cy3-conjugated Goat anti-Rabbit IgG (H+L) at 1:500 dilution. Blue: DAPI for nuclear staining.



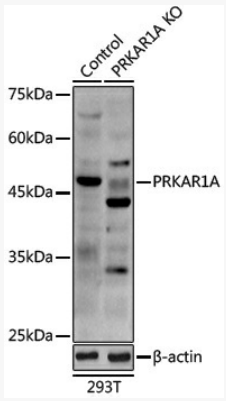
Western blot analysis of lysates from wild type (WT) and PRKAR1A knockout (KO) 293T cells, using [KO Validated] PRKAR1A Rabbit pAb (P100287) at 1:500 dilution.
Secondary antibody: HRP-conjugated Goat anti-Rabbit IgG (H+L) (LF102) at 1:10,000 dilution.
Lysates/proteins: 25µg per lane.
Blocking buffer: 3% nonfat dry milk in TBST.
Detection: ECL Kit.
Exposure time: 5s.



Western blot analysis of various lysates using [KO Validated] PRKAR1A Rabbit pAb (P100287) at 1:1,000 dilution.
Secondary antibody: HRP-conjugated Goat anti-Rabbit IgG (H+L) (LF102) at 1:10,000 dilution.
Lysates/proteins: 25µg per lane.
Blocking buffer: 3% nonfat dry milk in TBST.



Western blot analysis of lysates from Mouse testis using PRKAR1A Rabbit pAb (P100287) at 1:1,000 dilution.
Secondary antibody: HRP-conjugated Goat anti-Rabbit IgG (H+L) (LF102) at 1:10,000 dilution.
Lysates/proteins: 25 µg per lane.
Blocking buffer: 3% nonfat dry milk in TBST.
Detection: ECL Kit.
Exposure time: 10s.



Western blot analysis of lysates from wild type (WT) and PRKAR1A knockout (KO) 293T cells, using [KO Validated] PRKAR1A Rabbit pAb (P100287) at 1:1,000 dilution.
Secondary antibody: HRP-conjugated Goat anti-Rabbit IgG (H+L) (LF102) at 1:10,000 dilution.
Lysates/proteins: 25μg per lane.
Blocking buffer: 3% nonfat dry milk in TBST.
Detection: ECL Enhanced Kit.
Exposure time: 180s.