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PRKACA (ANT0038R) Rabbit mAb

CatalogNo: ANT8278 Recombinant R

Formulation: PBS,50%glycerol,0.05%Proclin 300,0.05%BSA

Quantity: 100 ug/vial

Host Species Reactivity Applications

Rabbit
 Human, Mouse, Rat,
 WB, IHC, IF, IP, ELISA

MW Isotype

• 40kD (Calculated) • IgG,Kappa

40kD (Observed)

Recommended Dilution Ratios

IHC 1:2000-1:10000 WB 1:1000-1:5000 IF 1:200-1:1000

ELISA 1:5000-1:20000

IP 1:50-1:200

Storage

Storage* -15°C to -25°C/1 year(Do not lower than -25°C)

Basic Information

Clonality Monoclonal

Clone Number ANT0038R

Target Information

Immunogen Information Specificity

Endogenous

Gene name PRKACA

Protein Name cAMP-dependent protein kinase catalytic subunit alpha

Organism	Gene ID	UniProt ID
Human	<u>5566</u> ;	<u>P17612</u> ;
Mouse	<u>18747</u> ;	<u>P05132</u> ;
Rat		<u>P27791</u> ;

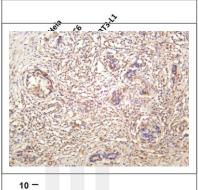
Cellular Localization Cytoplasm, Membrane

Tissue specificity Isoform 1 is ubiquitous. Isoform 2 is sperm-specific and is enriched in pachytene spermatocytes but is not detected in round spermatids.

Function

Catalytic activity:ATP + a protein = ADP + a phosphoprotein.,enzyme regulation:Activated by cAMP.,Function:Phosphorylates a large number of substrates in the cytoplasm and the nucleus.,ANTM:Asn-3 is partially deaminated to Asp giving rise to 2 major isoelectric variants, called CB and CA respectively.,similarity:Belongs to the protein kinase superfamily.,similarity:Belongs to the protein kinase superfamily. AGC Ser/Thr protein kinase family. cAMP subfamily.,similarity:Contains 1 AGC-kinase C-terminal domain.,similarity:Contains 1 protein kinase domain.,subcellular location:Translocates into the nucleus (monomeric catalytic subunit) (By similarity). The inactive holoenzyme is found in the cytoplasm.,subunit:A number of inactive tetrameric holoenzymes are produced by the combination of homo- or heterodimers of the different regulatory subunits associated with 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.,tissue specificity:Isoform 2 is sperm specific.,

Validation Data

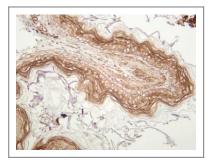


Various whole cell lysates were separated by 4-20% SDS-PAGE, and the membrane was blotted with anti-PRKACA (ANT0038R) antibody. The HRPconjugated Goat anti-Rabbit IgG(H + L) antibody was used to detect the antibody. Lane 1: Hela Lane 2: C6 Lane 3: 3T3-L1 Predicted band size: 40kDa Observed band size: 40kDa Human thyroid carcinoma was stained with anti-PRKACA (ANT0038R) rabbit antibody

Mouse stomach was stained with anti-PRKACA (ANT0038R) rabbit antibody



Rat stomach was stained with anti-PRKACA (ANT0038R) rabbit antibody



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