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Mouse Monoclonal Antibody PRKACA conjugated to Sepharose Beads

CatalogNo: ANT8278-S

Size 200ul

Storage Store at 4 °C for frequent use

Description

This Antagene antibody is immobilized via covalent binding of primary amino groups to N-hydroxysuccinimide (NHS)-activated sepharose beads. It is useful for immunoprecipitation assays.

PRKACA (ANTOO38R) Rabbit mAb

Formulation: 50% slurry in PBS pH 7.2 with 0.01mg NaN3a3 preservative.

Host Species Reactivity Applications

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

MW Isotype

40kD (Calculated) IgG, Kappa
40kD (Observed)

Recommended Dilution Ratios

IP

Basic Information

Clonality Monoclonal

Clone Number ANT0038R

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> ;

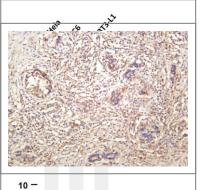
Cellular Localization Cytoplasm, Membrane

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

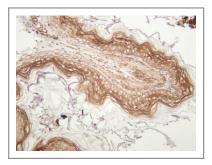


Various whole cell lysates were separated by 4-20% SDS-PAGE, and the membrane was blotted with anti-PRKACA (ANT0038R) antibody. The HRPconjugated Goat anti-Rabbit IgG(H + L) antibody was used to detect the antibody. Lane 1: Hela Lane 2: C6 Lane 3: 3T3-L1 Predicted band size: 40kDa Observed band size: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