10320 Camino Santa Fe, Suite G
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Mouse Prkaca/Prkacb Antibody (C-term)

Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP14456B

Specification

Mouse Prkaca/Prkacb Antibody (C-term) - Product Information

Application	**WB, IHC-P,E**
Primary Accession	P68181
Other Accession	P68182, P05383, P22694, P68180, P05131, P27791, P36887, P05132, P17612, P25321, P00517, NP_001157672.1, NP_001157670.1, Q9MZD9
Reactivity	**Human, Mouse**
Predicted	**Bovine, Hamster, Pig, Rat, Sheep**
Host	**Rabbit**
Clonality	**Polyclonal**
Isotype	**Rabbit IgG**
Calculated MW	**40708**
Antigen Region	**292-319**

Mouse Prkaca/Prkacb Antibody (C-term) - Additional Information

Gene ID 18749

Other Names
cAMP-dependent protein kinase catalytic subunit beta, PKA C-beta, Prkacb, Pkacb

Target/Specificity
This Mouse Prkaca/Prkacb antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 292-319 amino acids from the C-terminal region of mouse Prkaca/Prkacb.

Dilution
WB~~1:1000
IHC-P~~1:10~50
E~~Use at an assay dependent concentration.

Format
Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.

Storage
Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions
Mouse Prkaca/Prkacb Antibody (C-term) is for research use only and not for use in diagnostic or therapeutic procedures.

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Mouse Prkaca/Prkacb Antibody (C-term) - Protein Information

Name Prkacb

Synonyms Pkacb

Function Mediates cAMP-dependent signaling triggered by receptor binding to GPCRs (By similarity). PKA activation regulates diverse cellular processes such as cell proliferation, the cell cycle, differentiation and regulation of microtubule dynamics, chromatin condensation and decondensation, nuclear envelope disassembly and reassembly, as well as regulation of intracellular transport mechanisms and ion flux (PubMed:9368018). Regulates the abundance of compartmentalized pools of its regulatory subunits through phosphorylation of PJA2 which binds and ubiquitinates these subunits, leading to their subsequent proteolysis (By similarity). Phosphorylates GPKOW which regulates its ability to bind RNA (By similarity). Acts as a negative regulator of mTORC1 by mediating phosphorylation of RPTOR (By similarity).

Cellular Location
Cytoplasm {ECO:0000250|UniProtKB:P22694}. Cell membrane {ECO:0000250|UniProtKB:P22694}. Membrane {ECO:0000250|UniProtKB:P22694}; Lipid-anchor {ECO:0000250|UniProtKB:P22694}. Nucleus {ECO:0000250|UniProtKB:P05131} Note=Translocates into the nucleus (monomeric catalytic subunit). The inactive holoenzyme is found in the cytoplasm {ECO:0000250|UniProtKB:P05131}

Tissue Location
Isoform 1 is found in all tissues examined, with the highest expression in the brain and very low levels in the testis Isoform 2 is strongly expressed in the brain, in the prelimbic and insular cortex. Isoform 3 is also found only in the brain, but at very low levels.

Mouse Prkaca/Prkacb Antibody (C-term) - Protocols

Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

Mouse Prkaca/Prkacb Antibody (C-term) - Images

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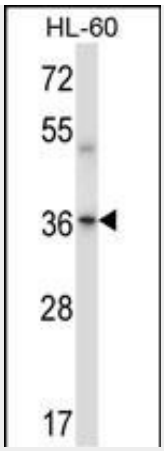
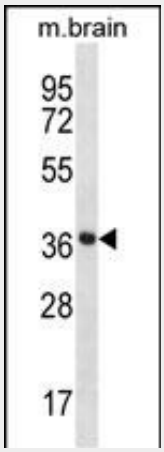
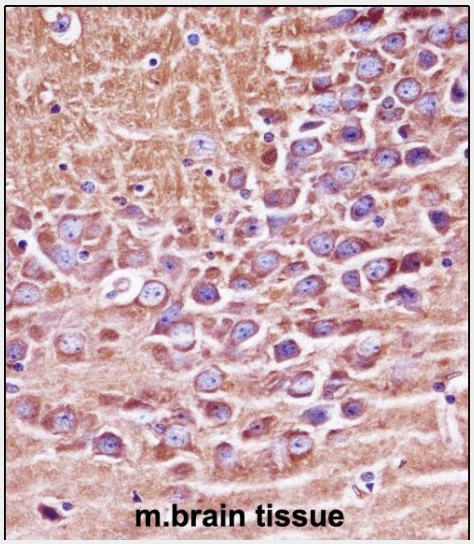


Mouse Prkaca/Prkacb Antibody (C-term) (Cat. #AP14456b) western blot analysis in HL-60 cell line lysates (35ug/lane).This demonstrates the Prkaca/Prkacb antibody detected the Prkaca/Prkacb protein (arrow).



Mouse Prkaca/Prkacb Antibody (C-term) (Cat. #AP14456b) western blot analysis in mouse brain tissue lysates (35ug/lane).This demonstrates the Prkaca/Prkacb antibody detected the Prkaca/Prkacb protein (arrow).



Mouse Prkaca/Prkacb Antibody (C-term) (AP14456b)immunohistochemistry analysis in formalin fixed and paraffin embedded mouse brain tissue followed by peroxidase conjugation of the secondary antibody and DAB staining.This data demonstrates the use of Mouse Prkaca/Prkacb

Antibody (C-term) for immunohistochemistry. Clinical relevance has not been evaluated.

Mouse Prkaca/Prkacb Antibody (C-term) - Background

Mediates cAMP-dependent signaling triggered by receptor binding to GPCRs. PKA activation regulates diverse cellular processes such as cell proliferation, the cell cycle, differentiation and regulation of microtubule dynamics, chromatin condensation and decondensation, nuclear envelope disassembly and reassembly, as well as regulation of intracellular transport mechanisms and ion flux.

Mouse Prkaca/Prkacb Antibody (C-term) - References

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Liu, J.X., et al. Seizure 19(7):414-420(2010)
Ha, C.H., et al. Proc. Natl. Acad. Sci. U.S.A. 107(35):15467-15472(2010)
Sarma, S., et al. Proc. Natl. Acad. Sci. U.S.A. 107(29):13165-13170(2010)
Rah, S.Y., et al. J. Biol. Chem. 285(28):21877-21887(2010)