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Mouse Prkaca/Prkacb Antibody (C-term) Blocking Peptide

Synthetic peptide
Catalog # BP14456b

Specification

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

Primary Accession P68181

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

Gene ID 18749

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

Format
Peptides are lyophilized in a solid powder format. Peptides can be reconstituted in solution using the appropriate buffer as needed.

Storage
Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C.

Precautions
This product is for research use only. Not for use in diagnostic or therapeutic procedures.

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

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

- Blocking Peptides

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

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

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

Ribeiro, R.A., et al. Br. J. Nutr. 104(8):1148-1155(2010)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)