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PKA 2 beta (PRKAR2B) Antibody (N-term) Blocking peptide

Synthetic peptide
Catalog # BP7052a

Specification

PKA 2 beta (PRKAR2B) Antibody (N-term) Blocking peptide - Product Information

Primary Accession	P31323
Other Accession	KAP3_HUMAN

PKA 2 beta (PRKAR2B) Antibody (N-term) Blocking peptide - Additional Information

Gene ID 5577

Other Names
cAMP-dependent protein kinase type II-beta regulatory subunit, PRKAR2B

Target/Specificity
The synthetic peptide sequence used to generate the antibody AP7052a was selected from the N-term region of human PRKAR2B . A 10 to 100 fold molar excess to antibody is recommended. Precise conditions should be optimized for a particular assay.

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.

PKA 2 beta (PRKAR2B) Antibody (N-term) Blocking peptide - Protein Information

Name PRKAR2B

Function
Regulatory subunit of the cAMP-dependent protein kinases involved in cAMP signaling in cells. Type II regulatory chains mediate membrane association by binding to anchoring proteins, including the MAP2 kinase.

Cellular Location
Cytoplasm. Cell membrane. Note=Colocalizes with PJA2 in the cytoplasm and at the cell membrane

Tissue Location
Four types of regulatory chains are found: I-alpha, I-beta, II-alpha, and II-beta. Their expression varies among tissues and is in some cases constitutive and in others inducible

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PKA 2 beta (PRKAR2B) Antibody (N-term) Blocking peptide - Protocols

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

- Blocking Peptides

PKA 2 beta (PRKAR2B) Antibody (N-term) Blocking peptide - Images

PKA 2 beta (PRKAR2B) Antibody (N-term) Blocking peptide - 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. The protein encoded by this gene is one of the regulatory subunits. This subunit can be phosphorylated by the activated catalytic subunit. This subunit has been shown to interact with and suppress the transcriptional activity of the cAMP responsive element binding protein 1 (CREB1) in activated T cells. Knockout studies in mice suggest that this subunit may play an important role in regulating energy balance and adiposity. The studies also suggest that this subunit may mediate the gene induction and cataleptic behavior induced by haloperidol.

PKA 2 beta (PRKAR2B) Antibody (N-term) Blocking peptide - References

Levy, F.O., et al., Mol. Endocrinol. 2(12):1364-1373 (1988).