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PRKAR2B Antibody (Center) Blocking Peptide

Synthetic peptide
Catalog # BP14960c

Specification

PRKAR2B Antibody (Center) Blocking Peptide - Product Information

Primary Accession	P31323

PRKAR2B Antibody (Center) Blocking Peptide - Additional Information

Gene ID 5577

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

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.

PRKAR2B Antibody (Center) 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

PRKAR2B Antibody (Center) Blocking Peptide - Protocols

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

- Blocking Peptides

PRKAR2B Antibody (Center) Blocking Peptide - Images

PRKAR2B Antibody (Center) Blocking Peptide - Background

cAMP is a signaling molecule important for a variety ofcellular functions. cAMP exerts its effects by activating thecAMP-dependent protein kinase, which transduces the signal throughphosphorylation of different target proteins. The inactive kinaseholoenzyme is a tetramer composed of two regulatory and twocatalytic subunits. cAMP causes the dissociation of the inactiveholoenzyme into a dimer of regulatory subunits bound to four cAMPand two free monomeric catalytic subunits. Four differentregulatory subunits and three catalytic subunits have beenidentified in humans. The protein encoded by this gene is one ofthe regulatory subunits. This subunit can be phosphorylated by theactivated catalytic subunit. This subunit has been shown tointeract with and suppress the transcriptional activity of the cAMPresponsive element binding protein 1 (CREB1) in activated T cells.Knockout studies in mice suggest that this subunit may play animportant role in regulating energy balance and adiposity. Thestudies also suggest that this subunit may mediate the geneinduction and cataleptic behavior induced by haloperidol. [providedby RefSeq].

PRKAR2B Antibody (Center) Blocking Peptide - References

Liu, Y.J., et al. Obesity (Silver Spring) (2010) In press :Adkins, D.E., et al. Mol. Psychiatry (2010) In press :Islam, A., et al. J. Biol. Chem. 283(37):25364-25371(2008)Ji, Z., et al. J. Biol. Chem. 283(32):21920-21925(2008)Vincent-Dejean, C., et al. Eur. J. Endocrinol. 158(6):829-839(2008)