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

Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP7052a

Product Information

Application	WB, E
Primary Accession	P31323
Reactivity	Human, Mouse
Predicted	Rat, Bovine, Canine, Rabbit
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Clone Names	RB3253
Calculated MW	46302
Antigen Region	32-62

Additional Information

Gene ID	5577
Other Names	cAMP-dependent protein kinase type II-beta regulatory subunit, PRKAR2B
Target/Specificity	This PKA 2 beta (PRKAR2B) antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 32-62 amino acids from the N-terminal region of human PKA 2 beta (PRKAR2B).
Dilution	WB~~1:1000 E~~Use at an assay dependent concentration.
Format	Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is prepared by Saturated Ammonium Sulfate (SAS) precipitation followed by dialysis against PBS.
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	PKA 2 beta (PRKAR2B) Antibody (N-term) is for research use only and not for use in diagnostic or therapeutic procedures.

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

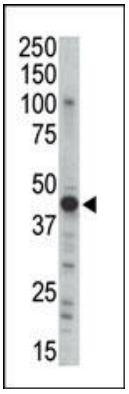
Background

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.

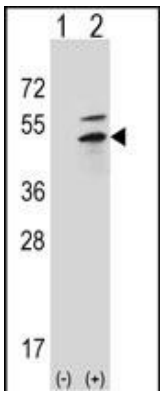
References

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

Images

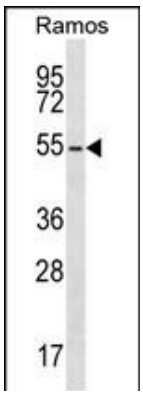


Western blot analysis of anti-PRKAR2B Pab (Cat. #AP7052a) in mouse brain tissue lysate. PRKAR2B (arrow) was detected using purified Pab. Secondary HRP-anti-rabbit was used for signal visualization with chemiluminescence.



Western blot analysis of PRKAR2B (arrow) using rabbit polyclonal PRKAR2B Antibody (G46) (Cat. #AP7052a). 293 cell lysates (2 ug/lane) either nontransfected (Lane 1) or transiently transfected (Lane 2) with the PRKAR2B gene.

PRKAR2B Antibody (G46) (Cat. #AP7052a) western blot analysis in Ramos cell line lysates (35ug/lane).This demonstrates the PRKAR2B antibody detected the



PRKAR2B protein (arrow).

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.