Recombinant Rat Prkar2b

Cat. No. Prkar2b-609R **Lot. No.** (See product label)

SPECIFICATION

Product Overview	Recombinant Rat Prkar2b is produced in*E. coli.*MW=45kDa.
Species	Rat
Source	E.coli
Description	cAMP-dependent protein kinase type II-beta regulatory subunit is an enzyme that in humans is encoded by the PRKAR2B gene. cAMP is a signaling molecule important for a variety of cellular functions. cAMP exerts its effects by activating the AMP-activated protein kinase (AMPK), which transduces the signal through phosphorylation of different target proteins. The inactive holoenzyme of AMPK 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 of AMPK have been identified in humans. The protein encoded by this gene is one of the regulatory subunits.
Purity	≥95% (SDS-PAGE).
Formulation	Liquid. In 10mM potassium phosphate, pH 6.8, containing 150mM NaCl, 14mM 2-mercaptoethanol, 1mM EDTA and 40% glycerol.
Application	Suitable for inhibition studies and for the analysis of interactions with so-called A-kinase anchoring proteins (AKAPs).

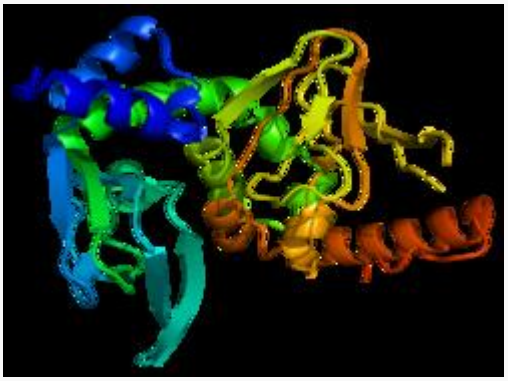
Tel: 1-631-559-9269 1-516-512-3133
Email: info@creative-biomart.com Fax: 1-631-938-8127
45-1 Ramsey Road, Shirley, NY 11967, USA

Reconstitution	Reconstitute with 100µsterile water. Further dilutions should be made with medium containing 5% fetal calf serum or a carrier protein.
Specific Activity	1.5x107U/mg.
Storage And Stability	-80°C. Keep the glycerol stock solution of the enzyme permanently at -20°C while pipetting to avoid loss of inhibitory activity. Avoid freeze/thaw cycles.

GENE INFORMATION

Gene Name	Prkar2b protein kinase, cAMP dependent regulatory, type II beta [Rattus norvegicus]
Synonyms	Prkar2b; protein kinase, cAMP dependent regulatory, type II beta; RATDNA; MGC116401
Gene ID	24679
mRNA Refseq	NM_001030020
Protein Refseq	NP_001025191
UniProt ID	P12369
Chromosome Location	6q16
Pathway	Apoptosis; Insulin signaling pathway
Function	cAMP binding; cAMP-dependent protein kinase regulator activity; kinase activity; nucleotide binding; protein kinase A catalytic subunit binding; protein domain specific binding

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