

## Recombinant Rat Prkar2b

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

### SPECIFICATION

<b>Product Overview</b>	Recombinant Rat Prkar2b is produced in <i>E. coli</i> . MW=45kDa.
<b>Species</b>	Rat
<b>Source</b>	E.coli
<b>Description</b>	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.
<b>Purity</b>	≥95% (SDS-PAGE).
<b>Formulation</b>	Liquid. In 10mM potassium phosphate, pH 6.8, containing 150mM NaCl, 14mM 2-mercaptoethanol, 1mM EDTA and 40% glycerol.
<b>Application</b>	Suitable for inhibition studies and for the analysis of interactions with so-called A-kinase anchoring proteins (AKAPs).

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**Reconstitution** Reconstitute with 100µl sterile water. Further dilutions should be made with medium containing 5% fetal calf serum or a carrier protein.

**Specific Activity** 1.5x10<sup>7</sup>U/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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