



# Recombinant Bovine cAMP-dependent protein kinase type II-beta regulatory subunit (PRKAR2B)

<b>Product Code</b>	CSB-YP018698BO
<b>Storage</b>	Store at -20°C, for extended storage, conserve at -20°C or -80°C.
<b>Uniprot No.</b>	P31322
<b>Product Type</b>	Recombinant Protein
<b>Immunogen Species</b>	Bos taurus (Bovine)
<b>Purity</b>	≥85% (SDS-PAGE)
<b>Sequence</b>	SIEIPAGLT ELLQGFTVEV LRHQPADLLE FALQHFTRLQ EENERKGTAR FGHEGRTWGD AGAAGGGGTP SKGVNFAEEP RHSDSENGEE EEEEAADAGA FNAPVINRFT RRASVCAEAY NPDEEEDDAE SRIIHPKTDD QRNRLQEACK DILLFKNLDP EQMSQVLDAM FEKLVKEGEH VIDQGDDGDN FYVIDRGTFD IYVKCDGVGR CVGNVDNRGS FGELALMYNT PRAATITATS PGALWGLDRV TFRRIIVKNN AKKRKMYESF IESLPFLKSL EVSERLKVVD VIGTKVYNDG EQIIAQGDSA DSFFIVESGE VKITMKRKGK SEVEENGAVE IARCSRQGYF GELALVTNKP RAASAHAIGT VKCLAMDVQA FERLLGPCME IMKRNIATYE EQLVALFGTN MDIVEPTA
<b>Source</b>	Yeast
<b>Target Names</b>	PRKAR2B
<b>Protein Names</b>	Recommended name: cAMP-dependent protein kinase type II-beta regulatory subunit
<b>Expression Region</b>	2-418
<b>Notes</b>	Repeated freezing and thawing is not recommended. Store working aliquots at 4°C for up to one week.
<b>Tag Info</b>	Tag type will be determined during the manufacturing process.
<b>Protein Length</b>	Full Length of Mature Protein
<b>Target Details</b>	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. This protein 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.

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**Reconstitution**

We recommend that this vial be briefly centrifuged prior to opening to bring the contents to the bottom. Please reconstitute protein in deionized sterile water to a concentration of 0.1-1.0 mg/mL. We recommend to add 5-50% of glycerol (final concentration) and aliquot for long-term storage at -20°C/-80°C. Our default final concentration of glycerol is 50%. Customers could use it as reference.

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**Shelf Life**

The shelf life is related to many factors, storage state, buffer ingredients, storage temperature and the stability of the protein itself.

Generally, the shelf life of liquid form is 6 months at -20°C/-80°C. The shelf life of lyophilized form is 12 months at -20°C/-80°C.