



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

Product Code	CSB-YP018698HU
Storage	Store at -20°C, for extended storage, conserve at -20°C or -80°C.
Uniprot No.	P31323
Product Type	Recombinant Protein
Immunogen Species	Homo sapiens (Human)
Purity	≥85% (SDS-PAGE)
Sequence	SIEIPAGLT ELLQGFTVEV LRHQPADLLE FALQHFTRLQ QENERKGTAR FGHEGRTWGD LGAAAGGGTP SKGVNFAEEP MQSDSEEDGE EEAAPADAGA FNAPVINRFT RRASVCAEAY NPDEEEDDAE SRIIHPKTDD QRNRLQEACK DILLFKNLDP EQMSQVLDAM FEKLVKDGEGH VIDQGDDGDN FYVIDRGTDF IYVKCDGVGR CVGNVDNRGS FGELALMYNT PRAATITATS PGALWGLDRV TFRRIIVKNN AKKRKMYESF IESLPFLKSL EFSERLKVVD VIGTKVYNDG EQIIAQGDSA DSFFIVESGE VKITMKRKGK SEVEENGAVE IARCSRQGYF GELALVTNKP RAASAHAIGT VKCLAMDVQA FERLLGPCME IMKRNIATYE EQLVALFGTN MDIVEPTA
Source	Yeast
Target Names	PRKAR2B
Protein Names	Recommended name: cAMP-dependent protein kinase type II-beta regulatory subunit
Expression Region	2-418
Notes	Repeated freezing and thawing is not recommended. Store working aliquots at 4°C for up to one week.
Tag Info	Tag type will be determined during the manufacturing process.
Protein Length	Full Length of Mature Protein
Target Details	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.

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.

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.