Recombinant Human cAMP-dependent protein kinase type II-alpha regulatory subunit (PRKAR2A)

Product Code	CSB-MP018697HU
Storage	Store at -20°C, for extended storage, conserve at -20°C or -80°C.
Uniprot No.	P13861
Product Type	Recombinant Protein
Immunogen Species	Homo sapiens (Human)
Purity	≥85% (SDS-PAGE)
Sequence	SHIQIPPGL TELLQGYTVE VLRQQPPDLV EFAVEYFTRL REARAPASVL PAATPRQSLG HPPPEPGPDR VADAKGDSES EEDEDLEVPV PSRFNRRVSV CAETYNPDEE EEDTDPRVIH PKTDEQRCRL QEACKDILLF KNLDQEQLSQ VLDAMFERIV KADEHVIDQG DDGDNFYVIE RGTYDILVTK DNQTRSVGQY DNRGSFGELA LMYNTPRAAT IVATSEGSLW GLDRVTFRRI IVKNNAKKRK MFESFIESVP LLKSLEVSER MKIVDVIGEK IYKDGERIIT QGEKADSFYI IESGEVSILI RSRTKSNKDG GNQEVEIARC HKGQYFGELA LVTNKPRAAS AYAVGDVKCL VMDVQAFERL LGPCMDIMKR NISHYEEQLV KMFGSSVDLG NLGQ
Source	Mammalian cell
Target Names	PRKAR2A
Protein Names	Recommended name: cAMP-dependent protein kinase type II-alpha regulatory subunit
Expression Region	2-404
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. It may interact with various A-kinase anchoring proteins and determine the subcellular localization of cAMP-dependent protein kinase. This subunit has been shown to regulate protein transport from endosomes to the Golgi apparatus and further to the endoplasmic reticulum (ER).

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.