Recombinant KAPCB protein (His tag)

Catalog Number	544491
Synonyms	PKA C-beta
Species	Human
Expression System	E. coli
Accession	P22694
Molecular Weight	Predictes a molecular mass of 42.15 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 43 kDa band.

Product Information

Sequence Region	2-351
Form	Lyophilized powder
Formulation	Lyophilized from sterile PBS, pH 7.4
Purity	>87%, by SDS-PAGE with Coomassie Brilliant Blue staining.
Endotoxin	Not tested.
Activity	Not tested.
Stability	Samples are stable for up to twelve months from date of receipt at -70℃
Protein Construction	DNA encoding 2-351 aa (P22694) were fused with 6His tag.

Storage & Handling

Reconstitution	Reconstitute at 0.25 μg/μl in sterile water for short-term storage. Reconstitution with 50% glycerol solution is recommended for longer term storage (see Stability and Storage for more details). If a different concentration is needed for your purposes please adjust the reconstitution volume as required (please note: the ion concentration of the final solution will vary according to the volume used). Note: Centrifuge vial before opening. When reconstituting, gently pipet and wash down the sides of the vial to ensure full recovery of the protein into solution.
Storage	Store it under sterile conditions at -20℃ to -80℃. It is recommended that the protein be aliquoted for optimal storage. Avoid repeated freeze-thaw cycles.
Shipping	In general, recombinant proteins are provided as lyophilized powder which are shipped at ambient temperature. Bulk packages of recombinant proteins are provided as frozen liquid. They are shipped out with blue ice unless customers require otherwise.

Description

Description	Recombinant Human PKA C-beta (PRKACB) Fragment (2-351): A high-purity, catalytically active protein fragment encompassing the complete protein kinase and AGC-kinase C-terminal domains. This product is an essential tool for investigating cAMP-dependent signaling, kinase activity, and domain-specific functions in cellular regulation. The full-length cAMP-dependent protein kinase catalytic subunit beta (PKA C-beta) is a central mediator of cAMP-dependent signaling initiated by G-protein coupled receptors (GPCRs). It regulates a wide array of critical cellular processes, including cell proliferation, the cell cycle, differentiation, microtubule dynamics, chromatin and nuclear envelope remodeling, intracellular transport, and ion flux. PKA C-beta also controls the stability of its regulatory subunits via phosphorylation and ubiquitination pathways and acts as a negative regulator of mTORC1 by phosphorylating RPTOR. It is localized in the cytoplasm, cell membrane (via lipid anchors), and nucleus, with the monomeric catalytic subunit translocating into the nucleus, while the inactive holoenzyme resides in the cytoplasm.