

Recombinant Human PKAC alpha/PRKACA Kinase

Catalog No.: RP03385LQ Recombinant

Sequence Information

Species Gene ID Swiss Prot Human 5566 P17612

Tags

N-GST

Synonyms

PRKACA; PKACA; PKA C-alpha; PKACα; cAMP-dependent protein kinase catalytic subunit alpha; catalytic subunit of protein kinase A

Product Information

Source Baculovirus-Insect	Purification > 90 % as
Cells	determined by SDS-
	PAGE;≥ 90 % as
	determined by
	HPLC.

Calculated MW Observed MW

67.1 kDa 60-70 kDa

Endotoxin

< 1 EU/µg of the protein by LAL method.

Formulation

Supplied as a 0.22 μ m filtered solution in 50 mM Tris-HCl, 150 mM NaCl, 20% glycerol, 5 mM DTT, 0.1 M Trehalose. (pH 7.5). Contact us for customized product form or formulation.

Reconstitution

Please use running water to thaw it quickly.

Contact

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Background

The catalytic subunit α of protein kinase A is a key regulatory enzyme that in humans is encoded by the PRKACA gene. This enzyme is responsible for phosphorylating other proteins and substrates, changing their activity. Protein kinase A catalytic subunit (PKA $C\alpha$) is a member of the AGC kinase family (protein kinases A, G, and C), and contributes to the control of cellular processes that include glucose metabolism, cell division, and contextual memory. PKA $C\alpha$ is part of a larger protein complex that is responsible for controlling when and where proteins are phosphorylated. Defective regulation of PKA holoenzyme activity has been linked to the progression of cardiovascular disease, certain endocrine disorders and cancers.

Basic Information

Description

Recombinant Human PKAC alpha/PRKACA Kinase is produced by Baculovirus-Insect Cells expression system. The target protein is expressed with sequence (Gly2-Phe351) of Human PRKACA (Accession #P17612) fused with a N-GST tag.

Bio-Activity

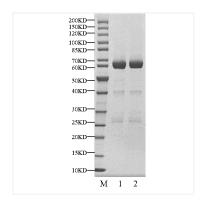
The activity of PRKACA is based on the MSA technology, and the content and ratio of the substrate and the product are directly separated and detected in real time and dynamically by the different migration rates of the substrate and the product after the enzymatic reaction.

Storage

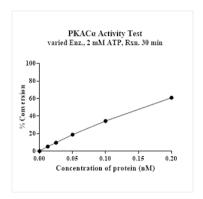
Store at -70°C. This product is stable at \leq -70°C for up to 1 year from the date of receipt. For optimal storage, aliquot into smaller quantities after centrifugation and store at recommended temperature.

Aliquots below 10 μL are not advisable. Product must not be stored in diluted solutions. Avoid repeated freeze-thaw cycles.

Avoid repeated freeze/thaw cycles.



Recombinant Human PKAC alpha/PRKACA Kinase was resolved with SDS-PAGE under reducing (Lane 1) and non-reducing (Lane 2) conditions.



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