

Recombinant Human CSNK1G1/CKI-gamma 1 Protein (His & GST Tag)

Catalog No. PKSH030361

Note: Centrifuge before opening to ensure complete recovery of vial contents.

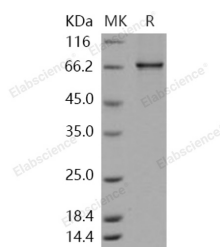
Description

Synonyms	CK1gamma1
Species	Human
Expression Host	Baculovirus-Insect Cells
Sequence	Met 1-Lys 422
Accession	NP_071331.2
Calculated Molecular Weight	76.3 kDa
Observed molecular weight	66 kDa
Tag	N-His-GST
Bioactivity	The specific activity was determined to be 4 nmol/min/mg using casein as substrate.

Properties

Purity	> 94 % as determined by reducing SDS-PAGE.
Endotoxin	< 1.0 EU per µg of the protein as determined by the LAL method.
Storage	Store at < -20°C, stable for 6 months. Please minimize freeze-thaw cycles.
Shipping	This product is provided as liquid. It is shipped at frozen temperature with blue ice/gel packs. Upon receipt, store it immediately at < -20°C.
Formulation	Supplied as sterile solution of 20mM Tris, 500mM NaCl, 10% glycerol, pH 7.4
Reconstitution	Not Applicable

Data



> 94 % as determined by reducing SDS-PAGE.

Background

Casein kinase I isoform gamma-1, also known as CSNK1G1, is a member of the protein kinase superfamily, CK1 Ser/Thr protein kinase family and casein kinase I subfamily. The casein kinase I family of protein kinases are serine / threonine-selective enzymes that function as regulators of signal transduction pathways in most eukaryotic cell types. Casein has been used as a substrate since the earliest days of research on protein phosphorylation. Casein kinase activity associated with the endoplasmic reticulum of mammary glands was first characterized in 1974 and its activity was shown to not depend on cyclic AMP. The CKI family of monomeric serine-threonine protein kinases is found in eukaryotic organisms from yeast

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to human. Mammals have seven family members: alpha, beta 1, gamma 1, gamma 2, gamma 3, delta, and epsilon. The family members have the highest homology in their kinase domains (53%–98% identical) and differ from most other protein kinases by the presence of the sequence S-I-N instead of A-P-E in kinase domain VIII. The CKI family members appear to have similar substrate specificity and substrate selection is thought to be regulated via subcellular localization and docking sites in specific substrates.