

# Recombinant Human Casein Kinase 1, Gamma 2, GST-tagged

Cat. No. CSNK1G2-1008H Lot. No. (See product label)

## SPECIFICATION

<b>Product Overview</b>	Full length recombinant human CSNK1G2 was expressed by baculovirus in Sf9 insect cells using an N-terminal GST tag.
<b>Species</b>	Human
<b>Source</b>	Sf9 Cells
<b>Description</b>	CSNK1G2 is a member of the CK1 family of serine/threonine protein kinases which play an important role in diverse cell processes, including DNA replication and repair. CSNK1G2 is a ubiquitously expressed cytoplasmic kinase that can interact and phosphorylate the metastatic tumor antigen 1 short form (MTA1s) co-localizing it in the cytoplasm. Phosphorylated MTA1s then sequesters the estrogen receptor-alpha in the cytoplasm of breast cancer cells. CSNK1G2 hyperphosphorylates the ceramide transfer protein CERT leading to a decrease in de novo sphingomyelin synthesis. The reduction in synthesis of sphingomyelin is reversed by the expression of CERT mutants that are not hyperphosphorylated.
<b>Applications</b>	Kinase Assay; Western Blot
<b>Molecular Weight</b>	73 kDa
<b>Expression System</b>	Sf9 insect cells using baculovirus
<b>Form</b>	Recombinant protein stored in 50 mM Tris-HCl, pH 7.5, 150 mM NaCl, 10 mM glutathione, 0.1 mM EDTA, 0.25 mM DTT, 0.1 mM PMSF, 25 % glycerol.

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<b>Specific Activity</b>	30 nmol/min/mg
<b>Purity</b>	> 80 %
<b>Concentration</b>	0.1 ug/ul
<b>Sequences</b>	Full length
<b>Storage</b>	Store product at -70°C. For optimal storage, aliquot target into smaller quantities after centrifugation and store at recommended temperature. For most favorable performance, avoid repeated handling and multiple freeze/thaw cycles.
<b>Pathways</b>	FoxO family signaling; Hedgehog signaling events mediated by Gli proteins; Hedgehog signaling pathway; Metabolism of lipids and lipoproteins; Sphingolipid metabolism; p53 pathway
<b>Full Length</b>	Full L.

## GENE INFORMATION

<b>Gene Name</b>	CSNK1G2 casein kinase 1, gamma 2 [ Homo sapiens ]
<b>Official Symbol</b>	CSNK1G2
<b>Synonyms</b>	CSNK1G2; casein kinase 1, gamma 2; CK1g2; CKI-gamma 2; casein kinase 1 isoform gamma-2; casein kinase I isoform gamma-2; EC 2.7.11.1
<b>Gene ID</b>	1455
<b>mRNA Refseq</b>	NM_001319

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<b>Protein Refseq</b>	NP_001310
<b>MIM</b>	602214
<b>UniProt ID</b>	P78368
<b>Chromosome Location</b>	19p13.3
<b>Function</b>	ATP binding; glycoprotein binding; magnesium ion binding; nucleotide binding; peptide binding; phosphoprotein binding; protein serine/threonine kinase activity; transferase activity

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