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

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

SPECIFICATION

Product Overview	Full length recombinant human CSNK1G2 was expressed by baculovirus in Sf9 insect cells using an N-terminal GST tag.
Species	Human
Source	Sf9 Cells
Description	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.
Applications	Kinase Assay; Western Blot
Molecular Weight	73 kDa
Expression System	Sf9 insect cells using baculovirus
Form	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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Specific Activity	30 nmol/min/mg
Purity	> 80 %
Concentration	0.1 ug/ul
Sequences	Full length
Storage	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.
Pathways	FoxO family signaling; Hedgehog signaling events mediated by Gli proteins; Hedgehog signaling pathway; Metabolism of lipids and lipoproteins; Sphingolipid metabolism; p53 pathway
Full Length	Full L.

GENE INFORMATION

Gene Name	CSNK1G2 casein kinase 1, gamma 2 [Homo sapiens]
Official Symbol	CSNK1G2
Synonyms	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
Gene ID	1455
mRNA Refseq	NM_001319

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

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