Recombinant Human CSNK1G2 Protein (His Tag)

Catalog Number: PKSH032010

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

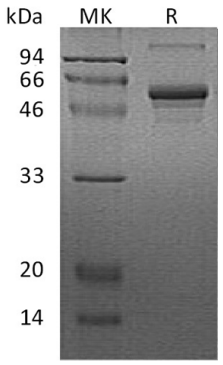
Description

Species	Human
Source	E.coli-derived Human CSNK1G2 protein Met 18-Lys415, with an N-terminal His
Calculated MW	47.6 kDa
Observed MW	50-60 kDa
Accession	P78368
Bio-activity	Not validated for activity

Properties

Purity	> 90 % as determined by reducing SDS-PAGE.
Concentration	Subject to label value.
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 a 0.2 μm filtered solution of 20mM Tris-HCl, 500mM NaCl, 10% Glycerol, 1mM DTT, pH 8.0.

Data



> 90 % as determined by reducing SDS-PAGE.

Background

Casein kinase I gamma 2 isoform (CSNK1G2); a member of the large casein kinase I (CKI) subfamily; protein kinase superfamily. It may affect the development of brain; and associate with vesicular trafficking and neurotransmitter releasing from small synaptic vesicles. The CKI family includes several other isoforms (alpha; beta; gamma; and delta). Dishevelled (Dsh); another positive component of the Wnt pathway; becomes phosphorylated in response to Wnt signals. All the CKI isoforms; with the exception of gamma; increase the phosphorylation of Dsh in vivo. Casein kinase 1 gamma (CK1gamma; or CSNK1G) is associated with the cell membrane and binds to LRP. CK1gamma was found to be needed for Wnt signaling through Wnt receptor LRP. CSNK1G2 inhibits Smad3-mediated TGF-beta responses including induction of target genes and cell growth arrest; and this inhibition is dependent on CSNK1G2 kinase activity. The overexpression of CSNK1G2 in human cancers; may act as an oncoprotein during tumorigenesis. In addition; as an MTA1s-binding protein; CSNK1G2 could further potentiate the estrogen receptor (ER) corepressive function of MTA1s.