

**Recombinant Protein Technical Manual** 

Recombinant Human CSNK1A1/CKI-alpha/CK1 Protein (GST Tag)(Active) RPES1772

### Product Data:

Product SKU: RPES1772	<b>Size:</b> 20µg	

Species: Human

Expression host: Baculovirus-Insect Cells

**Uniprot:** P48729

# **Protein Information:**

Molecular Mass:	65.2 kDa
AP Molecular Mass:	62 kDa
Tag:	N-GST
Bio-activity:	The specific activity was determined to be 30 nmol/min/mg using casein as substrate.
Purity:	> 90 % as determined by reducing SDS-PAGE.
Endotoxin:	< 1.0 EU per $\mu g$ 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 20mM Tris, 500mM NaCl, 2mM GSH, pH 7.4
Reconstitution:	Please refer to the printed manual for detailed information.
Application:	
Synonyms:	CK1:CK1a:CKIa:HEL-S-77p:HLCDGP1:PRO2975

## **Immunogen Information:**

### Sequence: Met 1-Phe 337

## Background:

Casein kinase I isoform alpha, also known as CKI-alpha, CK1 and CSNK1A1, is a cytoplasm protein which belongs to the protein kinase superfamily, CK1 Ser/Thr protein kinase family and casein kinase I subfamily. Casein kinases are operationally defined by their preferential utilization of acidic proteins such as caseins as substrates. High expression of CSNK2A1, or concomitantly high expression of CSNK2A1, are independent prognostic factors of poor survival in NSCLC patients. CSNK2A1 are useful prognosis markers in non-small cell lung cancer (NSCLC) patients after complete resection, independent of lymph node metastasis status. CSNK1A1 can phosphorylate a large number of proteins. It participates in Wnt signaling. It phosphorylates CTNNB1 at 'Ser-45'. CSNK1A1 may play a role in segregating chromosomes during mitosis.