

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



Catalog Number:PKSH030400

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

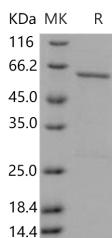
## Description

|                                    |  |
|------------------------------------|--|
| <b>Synonyms</b>                    | CK1;CK1a;CKIa;HEL-S-77p;HLCGP1;PRO2975   |
| <b>Species</b>                     | Human  |
| <b>Expression Host</b>             | Baculovirus-Insect Cells   |
| <b>Sequence</b>                    | Met 1-Phe 337  |
| <b>Accession</b>                   | P48729-1   |
| <b>Calculated Molecular Weight</b> | 65.2 kDa   |
| <b>Observed molecular weight</b>   | 62 kDa   |
| <b>Tag</b>                         | N-GST  |
| <b>Bioactivity</b>                 | The specific activity was determined to be 30 nmol/min/mg using casein as substrate. |

## Properties

|                       |  |
|-----------------------|--|
| <b>Purity</b>         | > 90 % as determined by reducing SDS-PAGE.   |
| <b>Endotoxin</b>      | < 1.0 EU per µg of the protein as determined by the LAL method.  |
| <b>Storage</b>        | Store at < -20°C, stable for 6 months. Please minimize freeze-thaw cycles.   |
| <b>Shipping</b>       | 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. |
| <b>Formulation</b>    | Supplied as sterile solution of 20mM Tris, 500mM NaCl, 2mM GSH, pH 7.4   |
| <b>Reconstitution</b> | Not Applicable   |

## Data



> 90 % as determined by reducing SDS-PAGE.

## 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.

## For Research Use Only

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