

# Recombinant Human CK1-delta/CSNK1D Kinase

Catalog No.: RP03403LQ **Recombinant**

## Sequence Information

**Species** Baculovirus- 1453 **Gene ID** 1453 **Swiss Prot** P48730  
Insect Cells

### Tags

N-GST

### Synonyms

CSNK1D; CK1δ; HCKID; CKI-delta; CK1δ; CK1d; Casein kinase I isoform delta

## Background

Casein kinase I isoform delta also known as CKI-delta or CK1 $\delta$  is an enzyme that in humans is encoded by the gene CSNK1D. It is a member of the CK1 (formerly named casein kinase 1) family of serine/threonine specific eukaryotic protein kinases encompassing seven distinct isoforms (CK1 $\alpha$ ,  $\gamma$ 1-3,  $\delta$ ,  $\epsilon$ ) as well as various post-transcriptionally processed splice variants (transcription variants, TVs) in mammals. Like eukaryotic protein kinases (ePKs) the different isoforms of the CK1 family consist of a N-terminal and a C-terminal lobe (N- and C-lobe, respectively), which are connected via a hinge region. CK1 $\delta$  is involved in the circadian rhythm, DNA damage and cellular stress, microtubule dynamics, cell cycle progression, genomic stability, mitosis and meiosis. CK1 $\delta$  is also involved in the regulation of microtubule polymerization and stability of the spindle apparatus and centrosomes during mitosis by directly phosphorylating  $\alpha$ -,  $\beta$ -, and  $\gamma$ -tubulin.

## Product Information

**Source** **Purification**  
 $\geq$  85% as determined by SDS-PAGE;  $\geq$  85% as determined by HPLC.

### Endotoxin

< 1 EU/ $\mu$ g of the protein by LAL method.

### Formulation

Supplied as a 0.22  $\mu$ m filtered solution in 50 mM Tris-HCl, 150 mM NaCl, 5%glycerol, 5 mM DTT, 0.1 M Trehalose. (pH 7.5). Contact us for customized product form or formulation.

### Reconstitution

Please use running water to thaw it quickly.

## Contact



[www.abclonal.com](http://www.abclonal.com)

## Basic Information

### Description

Recombinant Human CK1-delta/CSNK1D Kinase is produced by Baculovirus-Insect Cells expression system. The target protein is expressed with sequence (Glu2-Arg415) of Human CSNK1D (Accession #P48730) fused with a N-GST tag.

### Bio-Activity

The activity of CSNK1D is based on the MSA technology, and the content and ratio of the substrate and the product are directly separated and detected in real time and dynamically by the different migration rates of the substrate and the product after the enzymatic reaction.

### Shipping

The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature recommended below.

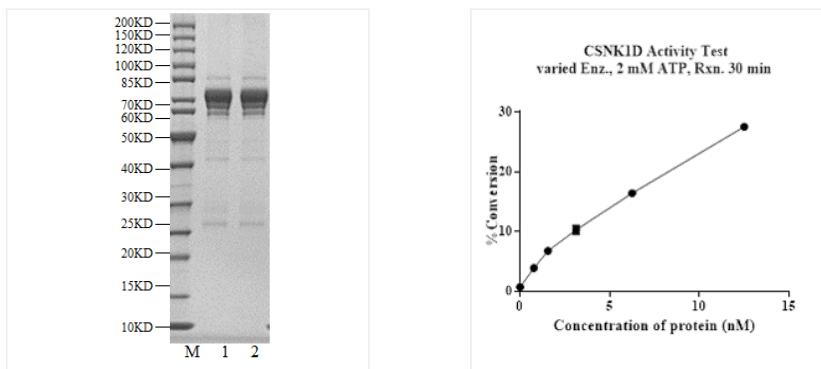
### Operational Notes

For your safety and health, please wear a lab coat and disposable gloves for handling.

### Storage

Store at -70°C. This product is stable at  $\leq$  -70°C for up to 1 year from the date of receipt. For optimal storage, aliquot into smaller quantities after centrifugation and store at recommended temperature. Aliquots below 10  $\mu$ L are not advisable. Product must not be stored in diluted solutions. Avoid repeated freeze-thaw cycles. Avoid repeated freeze/thaw cycles.

## Validation Data



Recombinant Human CK1-delta/CSNK1D Kinase was resolved with SDS-PAGE under reducing (Lane 1) and non-reducing (Lane 2) conditions.

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