

Casein Kinase Iδ rat, Recombinant

Cat. No. NATE-0140

Lot. No. (See product label)

Introduction

Description

The Casein kinase 1 family of protein kinases are serine/threonine-selective enzymes that function as regulators of signal transduction pathways in most eukaryotic cell types. CK1 isoforms are involved in Wnt signaling, circadian rhythms, nucleo-cytoplasmic shuttling of transcription factors, DNA repair, and DNA transcription.

Synonyms

Casein Kinase Iδ; Casein Kinase I; CK-Iδ; CK-I; Non-specific serine/threonine protein kinase; Protein phosphokinase; Protein serine kinase; Protein serine-threonine kinase; Protein-serine kinase; Serine kinase; Serine protein kinase; Serine (threonine) protein kinase; Serine-specific protein kinase; Serine/threonine protein kinase; Threonine-specific protein kinase

Product Information

Species

Rat

Source

E. coli

Form

solution

Molecular Weight

mol wt 41.8 kDa

Purity

> 90% (SDS-PAGE)

Activity

1,000-3,000 units/mg protein

Buffer

Solution in 20 mM HEPES pH 7.5, 1 mM DTT, 1 mM EDTA, 0.1% CHAPS, 250 mM NaCl, 20 µg/ml aprotinin, and 50% glycerol.

Pathway

Cell Cycle, organism-specific biosystem; Cell Cycle, Mitotic, organism-specific biosystem; Centrosome maturation, organism-specific biosystem; Circadian rhythm-mammal, organism-specific biosystem; Circadian rhythm-mammal, conserved biosystem; G2/M Transition, organism-specific biosystem; Gap junction, organism-specific biosystem

Function

ATP binding; ATP binding; glycoprotein binding; nucleotide binding; peptide binding; phosphoprotein binding; protein binding; protein kinase activity; protein kinase activity; protein serine/threonine kinase activity; protein serine/threonine kinase activity; tau-protein kinase activity; transferase activity, transferring phosphorus-containing groups

Unit Definition

One unit catalyzes the transfer of 1 nmol of phosphate from ATP into α-casein per minute at 30°C at pH 7.5.

Usage and Packaging

Preparation Instructions

CK-IδΔ317 is a truncated form of CK-Iδ comprising the amino acids 1-317 of the N-terminal catalytic domain.

Storage and Shipping Information

Stability −20°C