Creative Enzymes®

Checkpoint Kinase 2, Active Human, Recombinant

Cat. No. NATE-0122

Lot. No. (See product label)

Introduction

Description	CHEK2 is the official symbol for the human gene Checkpoint kinase 2. CHEK2 is located on the the long (q) arm of chromosome 22. CHEK2 is tumor suppressor gene that encodes the protein CHK2, a serine threonine kinase. CHK2 operates in an intricate network of proteins to elicit DNA repair, cell cycle arrest or apoptosis in response to DNA damage. Mutations to the CHEK2 gene have been linked to a wide range of cancers including breast cancer.
Applications	Kinase activity is measured as the molar amount of phosphate incorporated into the CHKtide per minute per mg protein at 30°C using a final concentration of 50 µM [32P] ATP.
Synonyms	Checkpoint Kinase 2; CHEK2; CDS1; CHK2; HuCds1; LFS2; PP1425; RAD53; hCds1; Chek2; Chk2

Product Information

Species	Human
Source	E. coli
Form	buffered aqueous glycerol solution
Molecular Weight	protein apparent mol wt ~88 kDa
Purity	> 85% (SDS-PAGE)
Buffer	Supplied at a concentration of approximately 0.1 mg/mL in 50 mM Tris-HCl, pH 7.5, 150 mM NaCl, 0.25 mM DTT, 0.1 mM EGTA, 0.1 mM EDTA, 0.1 mM PMSF, and 25% glycerol
Pathway	Cell Cycle, organism-specific biosystem; Cell Cycle Checkpoints, organism-specific biosystem; Cell cycle, organism-specific biosystem; Cell cycle, organism-specific biosystem; Cell cycle, conserved biosystem; FOXM1 transcription factor network, organism-specific biosystem; G1/S DNA Damage Checkpoints, organism-specific biosystem
Function	ATP binding; metal ion binding; nucleotide binding; protein binding; protein homodimerization activity; protein kinase binding; protein serine/threonine kinase activity; protein serine/threonine kinase activity; protein serine/threonine kinase activity

Storage and Shipping Information

Stability	−70°C