

Creatine Kinase BB Fraction Human, Recombinant

Cat. No. NATE-0139

Lot. No. (See product label)

Introduction

Description

Brain-type creatine kinase also known as CK-BB is a creatine kinase that in humans is encoded by the CKB gene. The protein encoded by this gene, CK-BB, consists of a homodimer of two identical brain-type CK-B subunits. BB-CK is a cytoplasmic enzyme involved in cellular energy homeostasis, with certain fractions of the enzyme being bound to cell membranes, ATPases, and a variety of ATP-requiring enzymes in the cell.

Applications

Human creatine kinase BB fraction has been used to investigate the survival benefit of the late percutaneous coronary intervention in patients after acute myocardial infarction. Human creatine kinase BB fraction has also been used in a study to analyze protein oxidations and resultant loss of function.

Synonyms

CKB; creatine kinase, brain; CKBB; creatine kinase B-type; creatine kinase-B; creatine kinase B chain; B-CK; Brain-type creatine kinase; Creatine Kinase BB; CK-BB; BB-CK

Product Information

Species

Human

Source

Pichia pastoris

Form

liquid

Purity

> 90% (SDS-PAGE)

Concentration

> 1.0 mg/mL

Buffer

Solution in 50% glycerol, Tris buffer with 10 mM Bis-Tris-HCl, 0.5mM DTT, 0.5mM EDTA

Pathway

Arginine and proline metabolism, organism-specific biosystem; Arginine and proline metabolism, conserved biosystem; Creatine metabolism, organism-specific biosystem; Creatine pathway, organism-specific biosystem; Creatine pathway, conserved biosystem; Metabolic pathways, organism-specific biosystem; Metabolism, organism-specific biosystem

Function

ATP binding; creatine kinase activity; nucleotide binding

Unit Definition

One unit will transfer 1.0 μ mole of phosphate from creatine phosphate to ADP per minute at 37°C (measured at 340 nm as one equimolar amount of NADH produced by coupled reaction).

Storage and Shipping Information

Stability

-70°C