

Recombinant Human Creatine Kinase, Brain

Cat. No. CKB-195H Lot. No. (See product label)

SPECIFICATION

Product Overview Recombinant Human CKBBI produced in *Pichia Pastoris* a glycosylated polypeptide chain having an identical amino acid sequence compared to the native enzyme, purified under non-denaturing conditions and reacts with polyclonal antibodies to BB Isoenzyme in ELISA. The CKBBI is purified by proprietary chromatographic techniques.

Species Human

Source P.pastoris

Description Creatine Kinase BB is a cytoplasmic enzyme involved in energy homeostasis. The encoded protein reversibly catalyzes the transfer of phosphate between ATP and various phosphogens such as creatine phosphate. It acts as a homodimer in brain as well as in other tissues, and as a heterodimer with a similar muscle isozyme in heart. The encoded protein is a member of the ATP: guanido phosphotransferase protein family. A pseudogene of this gene has been characterized.

Physical Appearance Sterile Filtered colourless liquid formulation.

Formulation The protein (2.2 mg/ml) contains 10mM Bis-Tris-HCl pH-6.2, 50% glycerol, 0.5mM EDTA and 0.5mM DTT.

Stability CKBBI although stable at 15°C for 7 days, should be stored desiccated below -18°C. Please prevent freeze-thaw cycles.

 Tel: 1-631-559-9269 1-516-512-3133

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Purity Greater than 95.0% as determined by: (a) Analysis by RP-HPLC. (b) Analysis by SDS-PAGE.

Biological Activity The biological activity measured by the enzymatic activity of Creatine phosphokinase procedure No.45-UV, 1IU-1 μ mole creatine phosphate was 500 IU/mg at 37°C.

GENE INFORMATION

Gene Name [CKB creatine kinase, brain \[Homo sapiens \]](#)

Synonyms CKB; creatine kinase, brain; B-CK; CKBB; creatine kinase-B; EC 2.7.3.2

Gene ID [1152](#)

mRNA Refseq [NM_001823](#)

Protein Refseq [NP_001814](#)

MIM [123280](#)

UniProt ID [P12277](#)

Chromosome Location 14q32.3

Pathway Arginine and proline metabolism; Metabolic pathways; Metabolism of amino acids

Function ATP binding; creatine kinase activity; nucleotide binding; protein binding

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