Recombinant Human creatine kinase, brain Protein, His&Flag tagged

Cat. No. CKB-170H **Lot. No.** (See product label)

SPECIFICATION

Product Overview	Recombinant human CKB protein (P12277) (Pro 2-Lys 381) with both His, Flag tag at the C-terminus was expressed in E. coli.
Species	Human
Source	E.coli
ProteinLength	2-381aa
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. There, CK-BB forms tightly coupled microcompartments for in situ regeneration of ATP that has been used up. The encoded protein reversibly catalyzes the transfer of "energy-rich" phosphate between ATP and creatine or between phospho-creatine (PCr) and ADP. Its functional entity is a homodimer (CK-BB) in brain and smooth muscle as well as in other tissues and cells such as neuronal cells, retina, kidney, bone, etc. In heart, a heterodimer (CK-MB) shahil consisting of one CK-B brain-type CK subunit and one CK-M muscle-type CK subunit is prominently expressed. The encoded CK-BB and CK-MB proteins are members of the ATP:guanido phosphotransferase protein family.

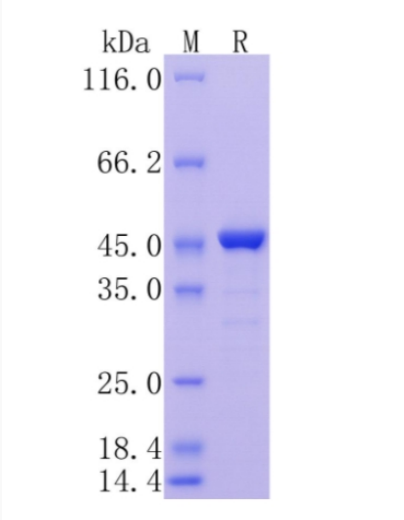
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Tag	C-His&Flag
Molecular Mass	45.5 kDa
Endotoxin	Less than 1.0 EU/μg by the LAL method.
Purity	>90% as determined by SDS-PAGE.
Storage	Please avoid repeated freeze-thaw cycles. Samples are stable for up to twelve months from date of receipt at -20 to -80 centigrade. It is recommended that aliquot the reconstituted solution to minimize freeze-thaw cycles.
Storage Buffer	Lyophilized from a 0.2 μm filtered solution of PBS, pH7.4, 5% Trehalose, 5% mannitol.
Reconstitution	Reconstitute at 250 μg/mL in sterile water.

GENE INFORMATION

Gene Name	CKB creatine kinase, brain [Homo sapiens (human)]
Official Symbol	CKB
Synonyms	CKB; creatine kinase, brain; CKBB; creatine kinase B-type; creatine kinase-B; creatine kinase B chain; B-CK;
Gene ID	1152
mRNA Refseq	NM_001823
Protein Refseq	NP_001814

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MIM	123280
UniProt ID	P12277
Protein on SDS-PAGE under reducing (R) condition.	

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