
Product Name: KD-Validated Creatine Kinase B Type Recombinant Rabbit Monoclonal Antibody**Catalog #: KVA00790**

For research use only.

Summary

Description	KO&KD-Validated antibody
Host	Rabbit
Application	WB,FCM,ICC,IHC-P
Reactivity	Human,Rat
Conjugation	Unconjugated
Modification	Unmodified
Isotype	Rabbit IgG
Clonality	Rabbit mAb
Form	Liquid
Storage	Aliquot and store at -20°C (valid for 12 months). Avoid freeze/thaw cycles.
Shipping	Ice bags
Buffer	Supplied in PBS (pH 7.4) containing 50% glycerol, and 0.02% sodium azide.
Purification	Affinity purification

Application

Dilution Ratio	WB 1:1,000-1:5,000; FC 1:200-1:2,000; ICC 1:100-1:1,000; IHC-P 1:100-1:200
Molecular Weight	Calculated MW: 42.6kDa

Antigen Information

Gene Name	CKB
Alternative Names	CKB; Creatine Kinase B; CKBB; Creatine Phosphokinase B-Type; Creatine Kinase Brain-Type; Creatine Kinase B Chain; Creatine Kinase B-Type; Brain Creatine Kinase; EC 2.7.3.2; CPK-B; B-CK; Epididymis Secretory Protein Li; Epididymis Luminal Protein 211; Creatine Kinase, Brain; Creatine Kinase Brain; HEL-S-29; EC 2.7.3; HEL-211; BCK
Gene ID	1152.0
SwissProt ID	P12277
Immunogen	A synthesized peptide derived from human Creatine kinase B type

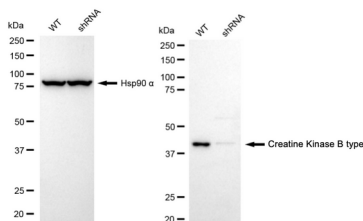
Background

The protein encoded by this gene 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. [provided by RefSeq, Jul 2008]

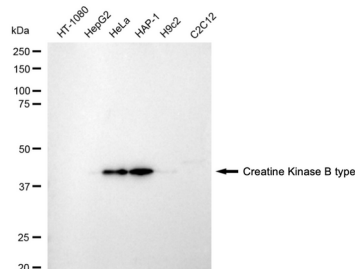
Research Area

Neuroscience,Signal Transduction,Cancer,Metabolism

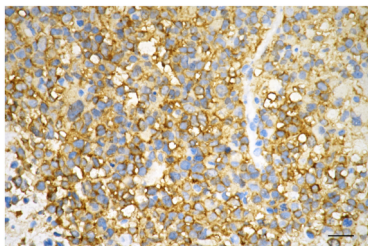
Image Data



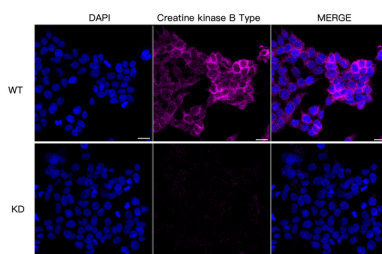
Western blotting analysis using creatine kinase B type antibody (KVA00790). Creatine kinase B type expression in wild-type (WT) and creatine kinase B type (CKB) shRNA knockdown (KD) HeLa cells with 20 µg of total cell lysates. Hsp90 α serves as a loading control. The blot was incubated with creatine kinase B antibody (KVA00790, 1:5,000) and HRP-conjugated goat anti-rabbit secondary antibody (APS0635, 1:10,000) respectively.



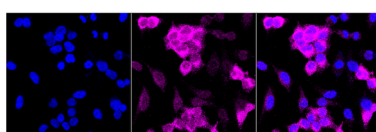
Western blotting analysis using creatine kinase B type antibody (KVA00790). Total cell lysates (30 µg) from various cell lines were loaded and separated by SDS-PAGE. The blot was incubated with creatine kinase B type antibody (KVA00790, 1:5,000) and HRP-conjugated goat anti-rabbit secondary antibody (APS0635, 1:10,000) respectively.



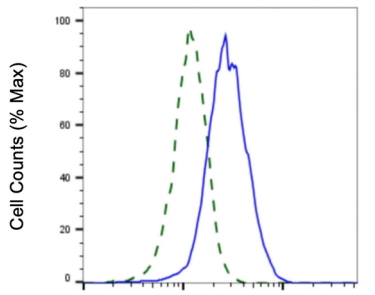
Immunohistochemistry was performed on paraffin-embedded human glioblastoma using creatine kinase B type antibody (KVA00790, 1:200). Antigen retrieval was done in sodium citrate buffer (pH 6.0). DAB was used for detection, with hematoxylin counterstaining. Images were acquired using a Nikon Ci-L Plus microscope (40× objective). Scale bar: 25 µm.



Immunocytochemical staining of HeLa cells using creatine kinase B type antibody (KVA00790, 1:1,000), Top panel: wild-type (WT); Bottom panel: Creatine kinase B type shRNA knockdown (KD). Nuclei were stained blue with DAPI; Creatine kinase B type was stained magenta with Alexa Fluor® 647. Scale bar, 20 µm. Permeabilization: Triton.

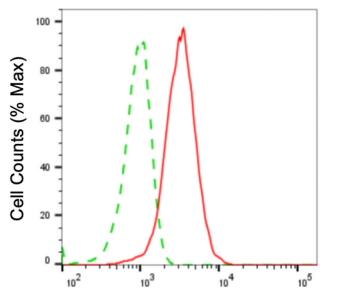


Immunocytochemical staining of HeLa cells with creatine kinase B type antibody (KVA00790, 1:1,000). Nuclei were stained blue with DAPI; Creatine kinase B type was stained magenta with Alexa Fluor® 647. Images were taken using Leica stellaris 5. Protein abundance based on laser Intensity and smart gain: Medium. Scale bar: 20 µm.



Creatine Kinase B Type-Alexa Fluor® 647

Validation of creatine kinase B type knockdown using flow cytometry. Wild-type(WT, Blue) and knockdown(KD, Green) HeLa cells were stained with creatine kinase B type antibody (KVA00790, 1:2,000) and analyzed using BD flow cytometer.



Creatine Kinase B Type-Alexa Fluor® 647

Flow cytometric analysis of creatine kinase B type expression in HeLa cells using creatine kinase B type antibody (KVA00790, 1:2,000). Green, isotype control; red, Creatine kinase B type.