Datasheet for ABIN1106704

anti-CKB antibody (N-Term) (Biotin)

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Overview

Quantity:	50 µg
Target:	CKB
Binding Specificity:	N-Term
Reactivity:	Human, Mouse, Rat, Rabbit
Host:	Mouse
Clonality:	Monoclonal
Conjugate:	This CKB antibody is conjugated to Biotin
Application:	Western Blotting (WB), Immunofluorescence (IF), Immunohistochemistry (Frozen Sections) (IHC (fro)), Immunohistochemistry (Paraffin-embedded Sections) (IHC (p))

Product Details

Immunogen:	Synthetic 17-mer peptide corresponding to the N-terminal sequence of human creatine kinase brain-type
Sequence:	SNSHNALKLR FPAEDEF
Clone:	CK-BYK-21E10
Isotype:	IgG2b
Cross-Reactivity (Details):	Species reactivity (tested):Human, mouse, rat, rabbit
Purification:	Protein G

Target Details

Target:	CKB
Alternative Name:	CKBB (CKB Products)
Background:	Human CKB is a protein of 381 amino acids (~45 kDa), expressed in a number of tissues. CKB is most abundant in adult brain, approx. 5-fold lower in the stomach, 10-fold lower in the heart and barely detectable in liver. In brain, whereas most CKB has been shown to be cytosolic, several of the reactions requiring CKB are membrane-associated. CKB belongs to the creatine kinase (CK) isoenzymes that catalyse the synthesis of phosphocreatine (PCr) and its subsequent use in the regeneration of ATP in cell types where the consumption of ATP is rapid and/or sudden. In the brain the different CK isoforms constitute an energy shuttle wherein ATP produced in the mitochondria is used by a mitochondrial CK [e.g. ubiquitous mitochondrial creatine kinase (uMi-CK)] to generate PCr, which is then transported and used by a cytoplasmic CK [e.g. brain creatine kinase (CKB)] to regenerate ATP at discrete cellular sites of high ATP turnover. CKB appears to have a role in regenerating ATP needed for the transport of ions and neurotransmitters since CKB has been localized to brain synaptic plasma membranes, possibly coupled to Na+/K+-ATPase and acetylcholine receptor-rich membranes. Expression of CKB is developmentally controlled: in rat, brain CKB protein at birth is extremely low and increases 10-fold until week 4. This reflects the many energy-demanding processes in brain during brain development.Synonyms: B-CK, CKB, Creatine kinase B chain, Creatine kinase B-type, Creatine kinase BB
UniProt:	P12277

Application Details

Application Notes:	Optimal working dilution should be determined by the investigator.
Restrictions:	For Research Use only

Handling

Concentration:	0.1 mg/mL
Buffer:	PBS, 0.02 % sodium azide, 0.1 % bovine serum albumin
Preservative:	Sodium azide
Precaution of Use:	This product contains sodium azide: a POISONOUS AND HAZARDOUS SUBSTANCE which should be handled by trained staff only.
Storage:	4 °C

Handling

Storage Comment:	Store at 2 - 8 °C.