

# Rabbit Anti-CKAP1 antibody

SL11713R

Product Name:	CKAP1
Chinese Name:	Cytoskeleton相关蛋白1/微管蛋白折叠辅助因子B抗体
Alias:	TBCB; CG22; CKAPI; Cytoskeleton associated protein 1; Cytoskeleton associated protein CKAPI; Cytoskeleton-associated protein 1; Cytoskeleton-associated protein CKAPI; TBCB_HUMAN; Tubulin folding cofactor B; Tubulin specific chaperone B; Tubulin-folding cofactor B; Tubulin-specific chaperone B.
Organism Species:	Rabbit
Clonality:	Polyclonal
React Species:	Human,Mouse,Rat,Dog,Horse,Rabbit,
Applications:	WB=1:500-2000ELISA=1:500-1000IHC-P=1:400-800IHC-F=1:400-800ICC=1:100- 500IF=1:100-500 (Paraffin sections need antigen repair) not yet tested in other applications. optimal dilutions/concentrations should be determined by the end user.
Molecular weight:	27kDa
Cellular localization:	cytoplasmic
Form:	Lyophilized or Liquid
<b>Concentration:</b>	lmg/ml
immunogen:	KLH conjugated synthetic peptide derived from human CKAP1:1-100/244
Lsotype:	IgG
Purification:	affinity purified by Protein A
Storage Buffer:	0.01M TBS(pH7.4) with 1% BSA, 0.03% Proclin300 and 50% Glycerol.
Storage:	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. The lyophilized antibody is stable at room temperature for at least one month and for greater than a year when kept at -20°C. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.
PubMed:	PubMed
Product Detail:	Microtubules, the primary component of the cytoskeletal network, are highly dynamic structures composed of Alpha/Beta Tubulin heterodimers. Biosynthesis of functional microtubules involve the participation of several chaperones, termed Tubulin folding cofactors A (TBCA), B (TBCB), D (TBCD), E (TBCE) and C (TBCC), that act on

folding intermediates downstream of the cytosolic chaperon, alternatively named TCP. TBCB (tubulin folding cofactor B), also known as CG22, CKAP1 or CKAPI, is a 244 amino acid cytoplasmic protein containing one CAP-Gly domain and in widely expressed. TBCB is involved in the regulation of tubulin heterodimer dissociation and may function as a negative regulator of axonal growth.

### **Function:**

Binds to alpha-tubulin folding intermediates after their interaction with cytosolic chaperonin in the pathway leading from newly synthesized tubulin to properly folded heterodimer. Involved in regulation of tubulin heterodimer dissociation. May function as a negative regulator of axonal growth.

## Subunit:

Supercomplex made of cofactors A to E. Cofactors A and D function by capturing and stabilizing tubulin in a quasi-native conformation. Cofactor E binds to the cofactor D-tubulin complex; interaction with cofactor C then causes the release of tubulin polypeptides that are committed to the native state. Cofactors B and E can form a heterodimer which binds to alpha-tubulin and enhances their ability to dissociate tubulin heterodimers. Binds to GAN.

#### Subcellular Location:

Cytoplasm. Cytoplasm > cytoskeleton. Colocalizes with microtubules. In differentiated neurons, located in the cytoplasm. In differentiating neurons, accumulates at the growth cone.

**Tissue Specificity:** Found in most tissues.

#### **Post-translational modifications:**

Phosphorylation by PAK1 is required for normal function. Phosphorylated upon DNA damage, probably by ATM or ATR.

Ubiquitinated in the presence of GAN which targets it for degradation by the proteasome.

Similarity: Belongs to the TBCB family. Contains 1 CAP-Gly domain.

# SWISS:

Q99426

**Gene ID:** 1155

Database links:

Entrez Gene: 1155 Human
Entrez Gene: 66411 Mouse
Entrez Gene: 292777 Rat
<u>Omim: 601303</u> Human
SwissProt: Q99426 Human
SwissProt: Q9D1E6 Mouse
Unigene: 31053 Human
Unigene: 27947 Mouse
Important Note:
This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.

... unagnostic applications.