Recombinant TBCB protein (His tag)

Catalog Number	541087
Synonyms	Cytoskeleton-associated protein 1; Cytoskeleton-associated protein CKAPI; Tubulin-specific chaperone B
Species	Human
Expression System	E. coli
Accession	Q99426
Molecular Weight	Predictes a molecular mass of 28.98 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 32 kDa band.

Product Information

Sequence Region	1-244
Form	Lyophilized powder
Formulation	Lyophilized from sterile PBS, pH 7.4
Purity	>85%, by SDS-PAGE with Coomassie Brilliant Blue staining.
Endotoxin	Not tested.
Activity	Not tested.
Stability	Samples are stable for up to twelve months from date of receipt at -70℃
Protein Construction	DNA encoding 1-244 aa (Q99426) were fused with 6His tag.

Storage & Handling

Reconstitution	Reconstitute at 0.25 μg/μl in sterile water for short-term storage. Reconstitution with 50% glycerol solution is recommended for longer term storage (see Stability and Storage for more details). If a different concentration is needed for your purposes please adjust the reconstitution volume as required (please note: the ion concentration of the final solution will vary according to the volume used). Note: Centrifuge vial before opening. When reconstituting, gently pipet and wash down the sides of the vial to ensure full recovery of the protein into solution.
Storage	Store it under sterile conditions at -20℃ to -80℃. It is recommended that the protein be aliquoted for optimal storage. Avoid repeated freeze-thaw cycles.
Shipping	In general, recombinant proteins are provided as lyophilized powder which are shipped at ambient temperature. Bulk packages of recombinant proteins are provided as frozen liquid. They are shipped out with blue ice unless customers require otherwise.

Description

Description	Recombinant Human Tubulin-folding cofactor B (TBCB) Fragment (aa 1-244) - A high-purity protein fragment encompassing the complete CAP-Gly domain, ideal for studying tubulin folding mechanisms and cytoskeletal regulation in neuronal development and differentiation research. Tubulin-folding cofactor B (TBCB) plays a critical role in the tubulin folding pathway by binding to alpha-tubulin folding intermediates after their interaction with cytosolic chaperonin, facilitating the formation of properly folded tubulin heterodimers. The protein is involved in regulating tubulin heterodimer dissociation and may function as a negative regulator of axonal growth. TBCB localizes to the cytoplasm and cytoskeleton, where it colocalizes with microtubules. In differentiated neurons, it resides in the cytoplasm, while during neuronal differentiation, it accumulates at the growth cone, suggesting its importance in neuronal development and cytoskeletal dynamics.