Recombinant TBB2B protein (His tag)

Catalog Number	548128
Species	Human
Expression System	E. coli
Accession	Q9BVA1
Molecular Weight	Predictes a molecular mass of 51.61 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 54 kDa band.

Product Information

Sequence Region	1-445
Form	Lyophilized powder
Formulation	Lyophilized from sterile PBS, pH 7.4
Purity	>86%, 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 1-445 aa (Q9BVA1) 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 beta-2B chain (TUBB2B) fragment (amino acids 1-445) - a high-quality protein reagent designed for structural and biochemical studies of microtubule dynamics and neuronal development. This stable, soluble fragment preserves the essential functional domains of tubulin, making it ideal for investigating cytoskeletal mechanisms and axon guidance pathways. Tubulin beta-2B chain is a fundamental component of microtubules, cylindrical structures formed by alpha- and beta-tubulin heterodimers that constitute the cytoskeleton. This protein plays a critical role in microtubule assembly, where GTP-bound tubulin dimers add to growing microtubule ends, followed by GTP hydrolysis to GDP in the microtubule lattice. Importantly, TUBB2B is essential for proper axon guidance in both central and peripheral nervous systems and has been implicated in neuronal migration processes. The protein localizes to the cytoplasm as part of the cytoskeletal network, where it contributes to the dynamic structural framework essential for cell shape, intracellular transport, and neuronal connectivity.