Recombinant TBA1 protein (His tag)

Catalog Number	532011
Species	Drosophila melanogaster
Expression System	E. coli
Accession	P06603
Gene ID	40848
Molecular Weight	Predictes a molecular mass of 51.57 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 54 kDa band.

Product Information

Sequence Region	1-450
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 1-450 aa (P06603) 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 Tubulin alpha-1 chain (EC 3.6.5.-) fragment (amino acids 1-450) from Drosophila melanogaster, representing a stable and soluble protein unit ideal for structural biology and biochemical studies of microtubule dynamics. Tubulin serves as the primary structural component of microtubules, which are cylindrical assemblies formed by lateral association of linear protofilaments composed of alpha- and beta-tubulin heterodimers. Microtubule elongation occurs through the addition of GTP-tubulin dimers to the microtubule end, where a stabilizing cap forms. Below this cap, tubulin dimers exist in a GDP-bound state due to the intrinsic GTPase activity of alpha-tubulin. This protein is localized to the cytoplasm and cytoskeleton, playing a fundamental role in cellular structure, intracellular transport, and cell division processes.