Recombinant MTUS2 protein (His tag)

Catalog Number	547419
Synonyms	Cardiac zipper protein; Microtubule plus-end tracking protein TIP150; Tracking protein of 150 kDa
Species	Human
Expression System	E. coli
Accession	Q5JR59
Molecular Weight	Predictes a molecular mass of 40.55 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 50 kDa band.

Product Information

Sequence Region	1004-1331
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 1004-1331 aa (Q5JR59) 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	Introducing the recombinant MTUS2 protein fragment (residues 1004-1331), a stable and soluble unit derived from human Microtubule-associated tumor suppressor candidate 2. This fragment is engineered for structural and biochemical studies, enabling researchers to explore microtubule dynamics and plus-end tracking mechanisms with high reliability. The full-length MTUS2 protein, also known as Cardiac zipper protein or TIP150, plays a critical role in regulating microtubule dynamics by binding to microtubules and targeting depolymerases like KIF2C to their growing plus-ends in coordination with MAPRE1. This activity helps control microtubule stability and function at distal tips, contributing to cellular processes such as division and intracellular transport. Located in the cytoplasm and associated with the cytoskeleton, MTUS2 is essential for maintaining microtubule network integrity, with implications for understanding cellular organization and potential disease mechanisms.