Recombinant MARE1 protein (His tag)

Catalog Number	542728
Synonyms	APC-binding protein EB1; End-binding protein 1; EB1
Species	Human
Expression System	E. coli
Accession	Q15691
Molecular Weight	Predictes a molecular mass of 17.00 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 17 kDa band.

Product Information

Sequence Region	2-134
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 2-134 aa (Q15691) 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 Microtubule-associated protein RP/EB family member 1 (MAPRE1/EB1) Fragment (aa 2-134) is a high-purity protein encompassing the Calponin-homology (CH) domain, essential for studying microtubule plus-end tracking and cytoskeletal regulation. This fragment serves as an ideal tool for investigating specific domain functions in microtubule dynamics, nucleation, and intracellular transport mechanisms. Microtubule-associated protein RP/EB family member 1 (MAPRE1/EB1) is a key plus-end tracking protein (+TIP) that binds to microtubule ends, regulating cytoskeletal dynamics, mitotic spindle positioning, and chromosome segregation. It recruits other +TIP proteins via SXLP motifs, stabilizes microtubules during mitosis, and assists in autophagosome transport. The protein localizes to the cytoplasm, cytoskeleton, centrosome, Golgi apparatus, and spindle poles, with specific accumulation at microtubule growing tips. Its roles in microtubule nucleation, elongation, and organization make it critical for cellular division, migration, and intracellular trafficking pathways.