Recombinant MARE2 protein (His tag)

Catalog Number	545025
Synonyms	APC-binding protein EB2; End-binding protein 2; EB2
Species	Human
Expression System	E. coli
Accession	Q15555
Molecular Weight	Predictes a molecular mass of 17.83 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 18 kDa band.

Product Information

Sequence Region	44-182
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 44-182 aa (Q15555) 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 MAPRE2 (EB2) Fragment (aa 44-182) is a high-purity protein designed for studying microtubule dynamics and cytoskeletal regulation. This fragment encompasses the essential Calponin-homology (CH) domain, making it an ideal tool for targeted functional assays and interaction studies. Microtubule-associated protein RP/EB family member 2 (MAPRE2/EB2) is a key adapter protein in Homo sapiens that stabilizes microtubules and anchors them at centrosomes, ensuring proper mitotic progression and genome integrity. It plays critical roles in spindle function, epithelial differentiation, neurite growth, and cell migration by recruiting partners like HAX1 to regulate focal adhesion dynamics. The protein localizes to the cytoplasm and cytoskeleton, accumulating at microtubule plus ends to direct polymerization and reorganization. The provided fragment (aa 44-182) retains the CH domain, enabling focused investigation into domain-specific mechanisms underlying microtubule stabilization and cellular processes.