Recombinant MAST2 protein (His tag)

Catalog Number	542908
Species	Human
Expression System	E. coli
Accession	Q6P0Q8
Molecular Weight	Predictes a molecular mass of 40.62 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 45 kDa band.

Product Information

Sequence Region	506-846
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 506-846 aa (Q6P0Q8) 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 MAST2 Kinase Domain Fragment (residues 506-846) is a high-purity protein designed for studying microtubule-associated serine/threonine-protein kinase 2 function. This fragment encompasses the complete protein kinase domain (residues 512-785), providing an ideal tool for investigating kinase activity, signal transduction mechanisms, and protein-protein interactions in cytoskeletal and membrane-associated processes. Microtubule-associated serine/threonine-protein kinase 2 (MAST2) serves as a crucial molecular bridge connecting the dystrophin/utrophin network with microtubule filaments through syntrophin interactions. The kinase modulates affinities of DMD and UTRN for associated proteins via phosphorylation and functions in multi-protein complexes during spermatid maturation. MAST2 also regulates immune responses by forming complexes with TRAF6 to inhibit NF-kappa-B activation and subsequent IL-12 synthesis in macrophages. Subcellularly, MAST2 localizes to the cytoplasm, cytoskeleton, and cell membrane as a peripheral membrane protein on the cytoplasmic side, with recruitment to sub-membranous areas upon interaction with CDHR2, highlighting its importance in membrane-cytoskeleton signaling interfaces.