Recombinant MCRS1 protein (His tag)

Catalog Number	545673
Synonyms	58 kDa microspherule protein; Cell cycle-regulated factor p78; INO80 complex subunit J; MCRS2
Species	Human
Expression System	E. coli
Accession	Q96EZ8
Molecular Weight	Predictes a molecular mass of 39.55 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 41 kDa band.

Product Information

Sequence Region	133-462
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 133-462 aa (Q96EZ8) 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 Microspherule Protein 1 (MCRS1) Fragment (aa 133-462) is a high-purity protein tool designed for investigating the functional roles of the FHA domain. This 330-amino acid fragment retains key structural elements essential for studying protein interactions and regulatory mechanisms in chromatin remodeling, transcriptional control, and cell cycle progression. Microspherule Protein 1 (MCRS1) is a multifunctional human protein involved in numerous critical cellular processes. It modulates transcriptional repressor activity by recruiting DAXX to the nucleolus and serves as a regulatory component of the chromatin remodeling INO80 complex, contributing to transcriptional regulation, DNA replication, and DNA repair. The protein also functions in mTORC1 complex activation by maintaining RHEB at lysosomes, regulates spindle assembly and microtubule dynamics during mitosis, and plays roles in centriolar satellite establishment and primary cilium formation. MCRS1 localizes to multiple cellular compartments including the nucleus (particularly the nucleolus), cytoplasm, centrosome, spindle poles, kinetochores, lysosomes, and centriolar satellites, reflecting its diverse functional repertoire. The provided fragment (aa 133-462) specifically encompasses the FHA domain, making it an ideal reagent for domain-specific functional studies.