Recombinant M18BP protein (His tag)

Catalog Number	545205
Synonyms	Kinetochore-associated protein KNL-2 homolog; HsKNL-2; P243
Species	Human
Expression System	E. coli
Accession	Q6P0N0
Molecular Weight	Predictes a molecular mass of 13.94 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 14 kDa band.

Product Information

Sequence Region	380-483
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 380-483 aa (Q6P0N0) 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 MIS18BP1 Fragment (380-483) is a high-purity protein fragment encompassing the SANTA domain of Mis18-binding protein 1 (HsKNL-2), essential for studying centromere assembly and chromosome segregation mechanisms. This domain-specific tool enables targeted investigation of CENPA recruitment and kinetochore function in mitosis. Mis18-binding protein 1 (MIS18BP1) is a human kinetochore-associated protein critical for accurate chromosome segregation during mitosis. It functions by recruiting CENPA to centromeres, a fundamental step in maintaining genomic stability. The protein localizes to the nucleus and associates specifically with centromeres from late anaphase through G1 phase, though it dissociates during earlier mitotic phases. Its chromatin-associated nature and cell cycle-dependent centromere localization underscore its regulated role in centromere maintenance and mitotic fidelity.