Recombinant MARF1 protein (His tag)

Catalog Number	541622
Synonyms	Limkain-b1; Meiosis arrest female protein 1
Species	Human
Expression System	E. coli
Accession	Q9Y4F3
Molecular Weight	Predictes a molecular mass of 28.15 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 28 kDa band.

Product Information

Sequence Region	350-584
Form	Lyophilized powder
Formulation	Lyophilized from sterile PBS, pH 7.4
Purity	>89%, 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 350-584 aa (Q9Y4F3) 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	This recombinant protein product features a 235-amino acid fragment (residues 350-584) of human Meiosis regulator and mRNA stability factor 1 (MARF1), specifically encompassing the NYN domain. This fragment serves as an essential tool for researchers investigating domain-specific functions in meiotic regulation and RNA metabolism. The full-length Meiosis regulator and mRNA stability factor 1 (MARF1) is an essential regulator of oogenesis required for female meiotic progression. It functions to repress transposable elements and prevent their mobilization, which is critical for maintaining germline integrity. The protein likely operates through RNA metabolic processes, similar to the piRNA system in males, forming RNA complexes that mediate transposon repression during meiosis via methylation mechanisms. Additionally, MARF1 provides protection against DNA double-strand breaks. Subcellular localization studies indicate its presence in peroxisomes, suggesting potential roles in peroxisome-related functions during germ cell development.