Recombinant SLBP protein (His tag)

Catalog Number	538050
Synonyms	Histone stem-loop-binding protein
Species	Human
Expression System	E. coli
Accession	Q14493
Molecular Weight	Predictes a molecular mass of 21.96 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 24 kDa band.

Product Information

Sequence Region	32-202
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 32-202 aa (Q14493) 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 Histone RNA Hairpin-Binding Protein (SLBP) Fragment (aa 32-202) is a high-purity, stable protein designed for structural and biochemical studies. This soluble fragment retains key functional characteristics, offering researchers a reliable tool for investigating histone mRNA processing and regulation. Histone RNA Hairpin-Binding Protein (SLBP) is an essential RNA-binding protein in humans that plays a critical role in histone pre-mRNA processing. It binds the stem-loop structure of replication-dependent histone pre-mRNAs and stabilizes the complex with U7 snRNP, facilitating efficient 3'-end processing. SLBP also contributes to nuclear export of mature histone mRNA, targeting it to cytoplasmic translation machinery, and stabilizes histone mRNA, potentially regulating cell-cycle-dependent histone gene expression. The protein localizes to both the nucleus and cytoplasm, shuttling between compartments via the Importin alpha/Importin beta receptor, with its distribution varying throughout the cell cycle. This recombinant fragment provides a valuable experimental model for studying these fundamental processes in gene expression regulation.