Recombinant SLU7 protein (His tag)

Catalog Number	541920
Synonyms	hSlu7
Species	Human
Expression System	E. coli
Accession	O95391
Molecular Weight	Predictes a molecular mass of 40.51 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 46 kDa band.

Product Information

Sequence Region	257-586
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 257-586 aa (O95391) 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	Introducing the recombinant Pre-mRNA-splicing factor SLU7 (hSlu7) fragment (residues 257-586), a highly stable and soluble protein unit engineered for structural and biochemical studies. This fragment, derived from the human SLU7 gene, retains key functional characteristics essential for investigating spliceosome mechanisms and mRNA processing, offering researchers a reliable tool for advancing understanding of RNA splicing dynamics. Pre-mRNA-splicing factor SLU7 (hSlu7), encoded by the SLU7 gene in Homo sapiens, is a critical component of the spliceosome required for pre-mRNA splicing. It specifically participates in the second catalytic step, facilitating the attack of the free hydroxyl group of exon I on the 3'-splice site to generate spliced mRNA and excised lariat introns. SLU7 ensures proper exon 1 positioning and accurate AG identification at 3'-splicing sites, potentially activating proximal AGs and regulating alternative splicing. Predominantly localized in the nucleus and nucleus speckles, it also shuttles to the cytoplasm under stress conditions, such as UV-C exposure or heat shock, where it may accumulate in stress granules. This dynamic subcellular behavior underscores its role in cellular stress responses and RNA processing fidelity.