Recombinant RSMB protein (His tag)

Catalog Number	537541
Synonyms	snRNP-B; Sm protein B/B'; Sm-B/B'; SmB/B'
Species	Human
Expression System	E. coli
Accession	P14678
Molecular Weight	Predictes a molecular mass of 12.05 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 12 kDa band.

Product Information

Sequence Region	1-90
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 1-90 aa (P14678) 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 Human snRNP-B/B' (Sm protein B/B') fragment (residues 1-90), a high-purity protein designed to encompass the complete Sm domain. This fragment serves as an essential tool for investigating core snRNP assembly, spliceosome formation, and pre-mRNA splicing mechanisms in molecular biology research. The full-length Small nuclear ribonucleoprotein-associated proteins B and B' (snRNP-B/B') is encoded by the SNRPB gene and functions as a fundamental component of spliceosomal U1, U2, U4, and U5 snRNPs, which constitute the building blocks of the spliceosome. It participates in both the minor spliceosome for U12-type intron splicing and the U7 snRNP complex involved in histone pre-mRNA 3'-end processing. Localized initially in the cytosol where SMN-mediated assembly into core snRNPs occurs, the protein subsequently translocates to the nucleus to integrate into spliceosomal complexes, including both pre-catalytic B complex and activated C complex stages. This protein's critical role in RNA processing makes it vital for understanding gene expression regulation and RNA metabolism.