Recombinant SPF45 protein (His tag)

Catalog Number	545691
Synonyms	45 kDa-splicing factor; RNA-binding motif protein 17
Species	Human
Expression System	E. coli
Accession	Q96I25
Molecular Weight	Predictes a molecular mass of 19.92 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 22 kDa band.

Product Information

Sequence Region	236-401
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 236-401 aa (Q96I25) 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 Splicing Factor 45 (RBM17) Fragment (236-401) is a high-purity protein designed for studying RNA splicing mechanisms. This 166-amino acid fragment includes the complete RRM domain, offering researchers a precise tool to investigate domain-specific functions in splice site recognition and regulation. Splicing Factor 45 (RBM17) is a nuclear protein critical for pre-mRNA processing, where it binds single-stranded 3'AG sequences at exon/intron borders to facilitate the second catalytic step of splicing. It plays a key role in alternative splicing regulation and can promote cryptic splice site usage, as demonstrated in sickle cell anemia models where it enhances aberrant splicing of mutant HBB genes. Located exclusively in the nucleus, RBM17 is essential for maintaining accurate splicing fidelity and has implications in both normal cellular function and disease pathogenesis.