Recombinant SFPQ protein (His tag)

Catalog Number	546853
Synonyms	100 kDa DNA-pairing protein; hPOMp100; DNA-binding p52/p100 complex, 100 kDa subunit; Polypyrimidine tract-binding protein-associated-splicing factor; PSF; PTB-associated-splicing factor
Species	Human
Expression System	E. coli
Accession	P23246
Molecular Weight	Predictes a molecular mass of 38.26 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 45 kDa band.

Product Information

Amino Acid Sequence	MSKIKLLRRP GEKTYTQRCR LFVGNLPADI TEDEFKRLFA KYGEPGEVFI NKGKGFGFIK LESRALAEIA KAELDDTPMR GRQLRVRFAT HAAALSVRNL SPYVSNELLE EAFSQFGPIE RAVVIVDDRG RSTGKGIVEF ASKPAARKAF ERCSEGVFLL TTTPRPVIVE PLEQLDDEDG LPEKLAQKNP MYQKERETPP RFAQHGTFEY EYSQRWKSLD EMEKQQREQV EKNMKDAKDK LESEMEDAYH EHQANLLRQD LMRRQEELRR MEELHNQEMQ KRKEMQLRQE EERRRREEEM MIRQREMEEQ MRRQLEHHHH HH
Form	Lyophilized powder
Formulation	Lyophilized from sterile 25 mM HEPES, 20 mM NaCl, pH 8.0
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 284-592 aa (P23246) were fused with C-terminal 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

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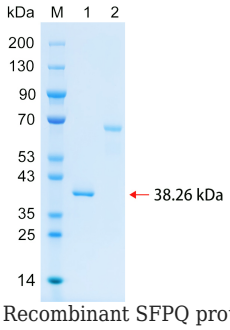
Recombinant Human SFPQ Fragment (aa 284-592): A high-purity, functional protein fragment encompassing the essential RRM 1 and RRM 2 domains of Splicing Factor, Proline- and Glutamine-Rich (SFPQ/PSF). This product is an ideal tool for studying RNA binding, spliceosome assembly, and transcriptional regulation in a defined, domain-specific context.
SFPQ is a multifunctional nuclear protein involved in critical cellular processes including pre-mRNA splicing, transcriptional regulation, and DNA repair. As a DNA- and RNA-binding protein, it functions as an essential splicing factor required early in spliceosome formation and for the catalytic step of splicing, typically as a heteromer with NONO. The protein specifically binds intronic polypyrimidine tracts and regulates signal-induced alternative splicing. Beyond splicing, SFPQ participates in transcriptional activation and repression, circadian clock regulation, DNA unwinding, and double-strand break repair through non-homologous end joining. It localizes predominantly to nuclear speckles and the nuclear matrix, with some cytoplasmic presence. The provided fragment contains the core RNA recognition motifs (RRM 1 and RRM 2) that mediate nucleic acid binding interactions central to SFPQ's diverse molecular functions.

Validation

SDS-PAGE



Recombinant SFPQ protein (His tag) SDS-PAGE
M: Marker; Lane 1: SFPQ; Lane 2: BSA