Recombinant PSPC1 protein (His tag)

Catalog Number	538620
Synonyms	Paraspeckle protein 1
Species	Human
Expression System	E. coli
Accession	Q8WXF1
Molecular Weight	Predictes a molecular mass of 37.48 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 44 kDa band.

Product Information

Sequence Region	70-372
Form	Lyophilized powder
Formulation	Lyophilized from sterile PBS, pH 7.4
Purity	>87%, 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 70-372 aa (Q8WXF1) 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 Paraspeckle Component 1 (PSPC1) fragment (amino acids 70-372), a high-purity protein encompassing both RRM domains. This fragment serves as an essential tool for investigating RNA binding mechanisms, paraspeckle formation, and transcriptional regulation in cellular and molecular research. Paraspeckle Component 1 (PSPC1) is a human RNA-binding protein critical for the formation of nuclear paraspeckles—subnuclear structures adjacent to splicing speckles. It binds to poly(A), poly(G), and poly(U) RNA homopolymers and collaborates with partners like NONO and SFPQ to regulate androgen receptor-mediated transcription and repress CLOCK-BMAL1 heterodimer activity in circadian clock control. PSPC1 also plays a role in innate immune response activation via the cGAS-STING pathway by assembling into the HDP-RNP complex, which facilitates IRF3 phosphorylation. Localized primarily in nucleus speckles, nucleoli, and the cytoplasm, PSPC1 cycles between paraspeckles and nucleoli, highlighting its dynamic involvement in RNA processing and cellular defense mechanisms.