Recombinant PCBP1 protein (His tag)

Catalog Number	547343
Synonyms	rC; Alpha-CP1; Heterogeneous nuclear ribonucleoprotein E1; hnRNP E1; Nucleic acid-binding protein SUB2.3
Species	Human
Expression System	E. coli
Accession	Q15365
Molecular Weight	Predictes a molecular mass of 19.58 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 20 kDa band.

Product Information

Sequence Region	1-169
Form	Lyophilized powder
Formulation	Lyophilized from sterile PBS, pH 7.4
Purity	>88%, 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 1-169 aa (Q15365) 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 PCBP1 Fragment (aa 1-169) is a high-purity protein designed for studying the KH domains of Poly(rC)-binding protein 1. This fragment encompasses the complete KH1 and KH2 domains, making it an ideal tool for investigating nucleic acid binding, RNA metabolism, and viral replication mechanisms in controlled experimental settings. Poly(rC)-binding protein 1 (PCBP1), also known as hnRNP E1, is a single-stranded nucleic acid-binding protein that preferentially binds oligo dC sequences. It plays critical roles in mRNA splicing regulation and is essential for erythropoiesis. During poliovirus infection, PCBP1 facilitates viral RNA replication initiation in concert with the viral protein 3CD. The protein localizes to both nucleus and cytoplasm, with evidence suggesting it shuttles between these compartments. The full-length protein's diverse functions in nucleic acid binding and viral replication make this specific KH domain-containing fragment particularly valuable for domain-specific functional studies.