Recombinant ERCC6 protein (His tag)

Catalog Number	540177
Synonyms	ATP-dependent helicase ERCC6; Cockayne syndrome protein CSB
Species	Human
Expression System	E. coli
Accession	Q03468
Molecular Weight	Predictes a molecular mass of 16.03 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 17 kDa band.

Product Information

Sequence Region	74-200
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 74-200 aa (Q03468) 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 DNA Excision Repair Protein ERCC-6 (ERCC6) Fragment (residues 74-200) is a high-purity, stable protein fragment designed for structural and biochemical studies. This fragment represents a soluble and functionally relevant region of the ATP-dependent helicase ERCC6, essential for transcription-coupled nucleotide excision repair (TC-NER) and DNA damage response pathways. Ideal for investigating protein interactions, enzymatic assays, and molecular mechanisms underlying DNA repair. The full-length DNA excision repair protein ERCC-6 (ERCC6), also known as Cockayne syndrome protein CSB, is a critical factor in transcription-coupled nucleotide excision repair (TC-NER), where it recognizes RNA polymerase II stalled at DNA lesions and initiates repair by recruiting ERCC8/CSA and TFIIH. It functions as an ATP-dependent helicase and chromatin remodeler, modifying DNA conformation and promoting homologous recombination (HR) over non-homologous end joining (NHEJ) for double-strand break repair. ERCC6 also regulates DNA damage response pathways, including ATM- and CHEK2-dependent signaling, to prevent premature mitosis and support neuronal differentiation. Localized to the nucleus and chromosomes, it binds stalled RNA polymerase II at damage sites, underscoring its role in genome integrity and cellular stress responses. This recombinant fragment (residues 74-200) provides a stable, soluble unit for exploring these functions without domain-specific regions.