Recombinant CTF8 protein (His tag)

Catalog Number	548923
Synonyms	hCTF8
Species	Human
Expression System	E. coli
Accession	P0CG13
Molecular Weight	Predictes a molecular mass of 14.97 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 15 kDa band.

Product Information

Sequence Region	1-121
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 1-121 aa (P0CG13) 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 Chromosome transmission fidelity protein 8 homolog (hCTF8) fragment (amino acids 1-121) is a high-purity protein designed for structural and biochemical studies. This fragment represents a stable, soluble domain ideal for investigating chromosome cohesion mechanisms and replication fidelity. Chromosome transmission fidelity protein 8 homolog (hCTF8) is a crucial chromosome cohesion factor in humans that ensures accurate sister chromatid cohesion and faithful chromosome transmission. It functions as a component of the CTF18-replication factor C (CTF18-RFC) complex, which loads proliferating cell nuclear antigen (PCNA) onto DNA in an ATP-dependent manner. This complex also interacts with DNA polymerase η (POLH), highlighting its role in coordinating DNA repair, recombination, and cohesion with replication fork progression. hCTF8 localizes to the nucleus and associates with chromatin during S phase, underscoring its importance in DNA replication and genome stability.