Recombinant CTF18 protein (His tag)

Catalog Number	540868
Synonyms	hCTF18; CHL12
Species	Human
Expression System	E. coli
Accession	Q8WVB6
Molecular Weight	Predictes a molecular mass of 27.28 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 27 kDa band.

Product Information

Sequence Region	363-596
Form	Lyophilized powder
Formulation	Lyophilized from sterile PBS, pH 7.4
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 363-596 aa (Q8WVB6) 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	This recombinant protein product features a stable and soluble fragment (amino acids 363-596) of the human Chromosome transmission fidelity protein 18 homolog (hCTF18), a key regulator of sister chromatid cohesion and DNA replication fidelity. This fragment is ideal for structural studies, biochemical assays, and investigating mechanisms of chromosome segregation and DNA damage repair. The full-length Chromosome transmission fidelity protein 18 homolog (hCTF18) is a nucleus-localized chromosome cohesion factor essential for accurate chromosome transmission and sister chromatid cohesion. 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, facilitating DNA replication and repair. hCTF18 also interacts with DNA polymerases POLH and POLE, playing a critical role in DNA repair synthesis by recruiting POLE to damage sites. The protein associates with chromatin during S phase, underscoring its importance in maintaining genomic stability. This fragment represents a computationally optimized region for experimental applications, derived from the well-characterized human protein (UniProt ID: Q8WVB6).