Recombinant PSF1 protein (His tag)

Catalog Number	544992
Synonyms	GINS complex subunit 1
Species	Human
Expression System	E. coli
Accession	Q14691
Molecular Weight	Predictes a molecular mass of 24.64 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 26 kDa band.

Product Information

Sequence Region	1-196
Form	Lyophilized powder
Formulation	Lyophilized from sterile PBS, pH 7.4
Purity	>85%, 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 1-196 aa (Q14691) 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 replication complex GINS protein PSF1 (GINS1) fragment (amino acids 1-196) - A highly stable and soluble protein unit essential for structural and biochemical studies of DNA replication machinery. This carefully selected fragment represents a functional domain of the GINS complex subunit 1, optimized for research applications requiring reliable protein performance. The full-length GINS1 protein is a critical component of the GINS complex, which plays an indispensable role in the initiation of DNA replication and progression of DNA replication forks. As part of the CDC45-MCM-GINS (CMG) helicase complex, GINS1 contributes to the core molecular machinery that unwinds template DNA during replication, serving as the central framework around which the entire replisome is assembled. The protein localizes to the nucleus and associates with chromatin, positioning it at the heart of DNA replication processes. This recombinant fragment (1-196) was computationally designed to provide researchers with a stable, soluble protein unit that maintains key structural features while being optimized for experimental applications in DNA replication research.