Recombinant PSF3 protein (His tag)

Catalog Number	543491
Synonyms	GINS complex subunit 3
Species	Human
Expression System	E. coli
Accession	Q9BRX5
Molecular Weight	Predictes a molecular mass of 26.19 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 28 kDa band.

Product Information

Sequence Region	1-216
Form	Lyophilized powder
Formulation	Lyophilized from sterile PBS, pH 7.4
Purity	>90%, 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 1-216 aa (Q9BRX5) 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 GINS3 (PSF3) Fragment (1-216) - A highly purified, stable protein fragment of the DNA replication complex GINS protein PSF3, designed for structural and biochemical studies of DNA replication machinery. This soluble fragment represents a key functional domain essential for investigating the molecular mechanisms of DNA replication initiation and fork progression. The full-length DNA replication complex GINS protein PSF3 (GINS complex subunit 3) plays a critical role in DNA replication through its essential function in the GINS complex. This complex is required for proper initiation of DNA replication and progression of DNA replication forks. The GINS complex serves as a core component of the CDC45-MCM-GINS (CMG) helicase, which is the fundamental molecular machine responsible for unwinding template DNA during replication. This helicase forms 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 machinery where it facilitates the essential unwinding of DNA templates required for faithful genome duplication.