Recombinant DBF4A protein (His tag)

Catalog Number	541452
Synonyms	Activator of S phase kinase; Chiffon homolog A; DBF4-type zinc finger-containing protein 1
Species	Human
Expression System	E. coli
Accession	Q9UBU7
Molecular Weight	Predictes a molecular mass of 15.59 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 16 kDa band.

Product Information

Sequence Region	136-256
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 136-256 aa (Q9UBU7) 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 DBF4 Fragment (136-256): A high-purity protein fragment encompassing the BRCT 2 domain of Protein DBF4 homolog A, designed for targeted studies on DNA replication initiation and cell cycle regulation. Protein DBF4 homolog A (DBF4) is a regulatory subunit for CDC7, activating its kinase activity and playing a central role in DNA replication and cell proliferation. It is essential for S phase progression, where the CDC7-DBF4A complex selectively phosphorylates the MCM2 subunit at 'Ser-40' and 'Ser-53', thereby regulating the initiation of DNA replication during the cell cycle. The protein is localized to the nucleus, as supported by experimental evidence. This recombinant fragment (residues 136-256) specifically includes the BRCT 2 domain, enabling focused investigation into domain-specific functions in replication mechanisms.