Recombinant DPOE4 protein (His tag)

Catalog Number	543713
Synonyms	DNA polymerase II subunit 4; DNA polymerase epsilon subunit p12
Species	Human
Expression System	E. coli
Accession	Q9NR33
Molecular Weight	Predictes a molecular mass of 10.61 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 11 kDa band.

Product Information

Sequence Region	37-117
Form	Lyophilized powder
Formulation	Lyophilized from sterile PBS, pH 7.4
Purity	>88%, 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 37-117 aa (Q9NR33) 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 polymerase epsilon subunit 4 (POLE4) fragment (residues 37-117), a stable and soluble protein unit ideal for structural biology and biochemical studies of DNA replication and repair mechanisms. DNA polymerase epsilon subunit 4 is an accessory component of the DNA polymerase epsilon complex, which plays critical roles in chromosomal DNA replication and DNA repair processes. This nuclear-localized protein contributes to the maintenance of genomic integrity, as evidenced by its involvement in essential cellular mechanisms. The selected fragment represents a computationally optimized region designed to facilitate experimental investigations into the protein's functional properties.