# Recombinant PRI2 protein (His tag)

| | |
|---|---|
| **Catalog Number** | 537782 |
| **Synonyms** | DNA primase 58 kDa subunit; p58 |
| **Species** | Human |
| **Expression System** | E. coli |
| **Accession** | P49643 |
| **Molecular Weight** | Predictes a molecular mass of 54.79 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 56 kDa band. |

## Product Information

| | |
|---|---|
| **Sequence Region** | 1-457 |
| **Form** | Lyophilized powder |
| **Formulation** | Lyophilized from sterile PBS, pH 7.4 |
| **Purity** | >89%, 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 1-457 aa (P49643) 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.<br>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 Primase Large Subunit (PRIM2) Fragment (1-457) is a high-quality, stable protein designed for structural and biochemical studies. This 58 kDa regulatory subunit fragment, derived from the DNA primase complex, supports research into DNA replication initiation mechanisms by providing a soluble and functional unit ideal for experimental applications.<br>The DNA primase large subunit (PRIM2), also known as p58, is a regulatory component of the DNA primase complex and part of the DNA polymerase alpha complex, which is essential for initiating DNA synthesis during the S phase of the cell cycle. It facilitates the oligomerization of short RNA primers on both leading and lagging strands, coordinates the catalytic activities of PRIM1 and POLA2 during the primase-to-polymerase switch, and binds RNA:DNA duplexes to ensure proper DNA replication. This protein plays a critical role in cellular division and genome stability, with implications in cancer and developmental biology research. |