Recombinant WRIP1 protein (His tag)

Catalog Number	543435
Synonyms	Werner helicase-interacting protein 1
Species	Human
Expression System	E. coli
Accession	Q96S55
Molecular Weight	Predictes a molecular mass of 51.76 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 52 kDa band.

Product Information

Sequence Region	217-665
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 217-665 aa (Q96S55) 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 ATPase WRNIP1 (EC 3.6.1.-) Fragment (aa 217-665) - A high-quality recombinant protein fragment of Werner helicase-interacting protein 1, specifically engineered for structural and biochemical studies. This 449-amino acid fragment represents a stable and soluble unit of the protein, ideal for investigating DNA synthesis modulation and innate immune signaling mechanisms. WRNIP1 (Werner helicase-interacting protein 1) functions as a key modulator of initiation or reinitiation events during DNA polymerase delta-mediated DNA synthesis. In the presence of ATP, it regulates DNA synthesis efficiency and plays a crucial role in innate immune defense against viruses by stabilizing RIGI dsRNA interactions and promoting RIGI 'Lys-63'-linked polyubiquitination, thereby facilitating signal transmission through mitochondrial MAVS. The protein localizes to both the nucleus and cytoplasm, where it colocalizes with WRN in granular nuclear structures, highlighting its importance in cellular DNA maintenance and antiviral defense pathways.