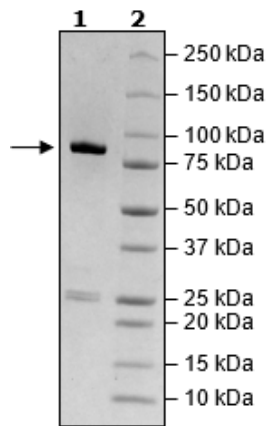


## Product Information

<b>Description:</b>	Recombinant human WRN (Werner syndrome ATP-dependent helicase), encompassing amino acids 517-1093. This construct contains an N-terminal GST-tag followed by a Thrombin cleavage site. The recombinant protein was affinity purified.
<b>Background:</b>	The WRN gene was first discovered as the gene mutated in Werner syndrome, a recessive genetic disorder characterized by segmental progeria and elevated cancer predisposition. WRN is a multifunctional enzyme with helicase and exonuclease activities and plays roles in various cellular processes crucial for the maintenance of genome stability, including DNA replication, transcription, DNA repair, and telomere maintenance. WRN depletion causes cell cycle arrest, DNA damage, mitotic defects, chromosome shattering, and apoptosis. Loss of heterozygosity involving the <i>WRN</i> loci at chromosome 8p11.2-p12 occurs frequently in many different cancers, pointing to its role as a tumor suppressor gene. Small molecule inhibitors of WRN can be used to induce synthetic lethality and offer a new therapeutical approach for cancer treatment.
<b>Species:</b>	Human
<b>Construct:</b>	WRN (GST-Th-517-1093)
<b>Concentration:</b>	0.70 mg/ml
<b>Expression System:</b>	Sf9
<b>Purity:</b>	87%
<b>Format:</b>	Aqueous buffer solution.
<b>Formulated In:</b>	40 mM Tris-HCl, pH 8.0, 200 mM NaCl, 2.2 mM KCl, 0.04% Tween-20, 2 mM glutathione, 1 mM TCEP, and 20% glycerol
<b>MW:</b>	92 kDa
<b>Genbank Accession:</b>	NM_000553
<b>Stability:</b>	At least 6 months at -80°C.
<b>Storage:</b>	-80°C
<b>Instructions for Use:</b>	Thaw on ice and gently mix prior to use. DO NOT VORTEX. Perform a quick spin before opening. Aliquot into small volumes and flash freeze for long term storage. Avoid multiple freeze/thaw cycles.
<b>Assay Conditions:</b>	Assay was performed according to WRN Helicase Activity Assay Kit (BPS Bioscience #78852) with various amounts of WRN, GST-Tag Recombinant.
<b>Applications:</b>	Useful for the study of enzyme kinetics, screening inhibitors, and selectivity profiling.

## Quality Control Data

### 4-20% SDS-PAGE Coomassie Staining



### WRN Activity

