

Recombinant Human TWNK protein, His & T7-tagged

Cat. No. TWNK-8028H **Lot. No.** (See product label)

SPECIFICATION

Product Overview	Recombinant Human TWNK aa. (Val384~Lys635 (Accession # Q96RR1)) fused with N-terminal His & T7 tag was produced in E. coli cells.
Species	Human
Source	E.coli
ProteinLength	Val384~Lys635
Description	This gene encodes a hexameric DNA helicase which unwinds short stretches of double-stranded DNA in the 5' to 3' direction and, along with mitochondrial single-stranded DNA binding protein and mtDNA polymerase gamma, is thought to play a key role in mtDNA replication. The protein localizes to the mitochondrial matrix and mitochondrial nucleoids. Mutations in this gene cause infantile onset spinocerebellar ataxia (IOSCA) and progressive external ophthalmoplegia (PEO) and are also associated with several mitochondrial depletion syndromes. Alternative splicing results in multiple transcript variants encoding distinct isoforms.
Form	Freeze-dried powder
Molecular Mass	Predicted Molecular Mass: 32.4kDa
Endotoxin	<1.0EU per 1ug (determined by the LAL method)
Purity	>95%

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Characteristic	The isoelectric point is 6.3.
Applications	SDS-PAGE; WB; ELISA; IP
Stability	The thermal stability is described by the loss rate of the target protein. The loss rate was determined by accelerated thermal degradation test, that is, incubate the protein at 37°C for 48h, and no obvious degradation and precipitation were observed. (Referring from China Biological Products Standard, which was calculated by the Arrhenius equation.) The loss of this protein is less than 5% within the expiration date under appropriate storage condition.
Storage	Avoid repeated freeze/thaw cycles. Store at 2-8°C for one month. Aliquot and store at -80°C for 12 months.
Storage Buffer	Supplied as lyophilized form in PBS, pH7.4, containing 5% trehalose, 0.01% sarcosyl.
Reconstitution	Reconstitute in sterile PBS, pH7.2-pH7.4.

GENE INFORMATION

Gene Name	TWNK twinkle mtDNA helicase [Homo sapiens (human)]
Official Symbol	TWNK
Synonyms	PEO; PEO1; SCA8; ATXN8; IOSCA; PEOA3; SANDO; TWINL; MTDPS7; PRLTS5; C10orf2; T7 gp4-like protein with intramitochondrial nucleoid localization; T7 helicase-related protein with intramitochondrial nucleoid localization; T7-like mitochondrial DNA helicase; ataxin 8; mitochondrial twinkle protein; progressive external ophthalmoplegia 1 protein; twinkle protein, mitochondrial
Gene ID	56652

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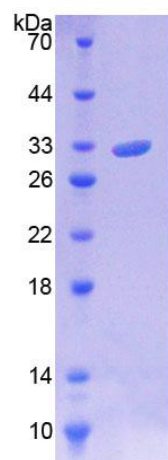
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mRNA Refseq [NM_001163812.1](#)

Protein Refseq [NP_001157284.1](#)

UniProt ID [Q96RR1](#)

SDS-PAGE



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