

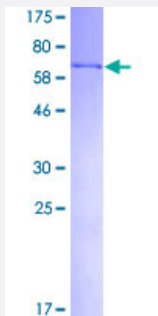
Full-Length

FEN1 (Human) Recombinant Protein (P01)

Catalog # H00002237-P01

Size 2 ug

Applications



Specification

Product Description

Human FEN1 full-length ORF (AAH00323, 1 a.a. - 380 a.a.) recombinant protein with GST-tag at N-terminal.

Sequence

MGIQGLAKLIADVAPSAIRENDIKSYFGRKVAIDASMSYQFLIAVRQGGDVLQNEEGETTSHLMGM
FYRTIRMMENGIKPVYVFDGKPPQLKSGELAKRSERRAEAEKQLQQAQAAGAEQEVEKFTKRLV
KVTQKHNDCKHLLSLMGIPYLDAPSEAEASCAALVKAGKVYAAATEDMDCLTFGSPVLMRHLT
ASEAKKLPIQEFHLSRILQELGLNQEQFVDLCILLGSDYCESIRGIGPKRAVDLIQKHKSIEEIVRRLD
PNKYPVPENWLHKEAHQLFLEPEVLDPEVELKWSEPNEEELIKFMCGEKQFSEERIRSGVKRL
SKSRQGSTQGRLLDDFFKVTGSLSSAKRKEPEPKGSTKKKAKTGAAGKFKRGK

Host

Wheat Germ (in vitro)

Theoretical MW (kDa)

67.43

Preparation Method

[in vitro wheat germ expression system](#)

Purification

Glutathione Sepharose 4 Fast Flow

Quality Control Testing

12.5% SDS-PAGE Stained with Coomassie Blue.

Storage Buffer

50 mM Tris-HCl, 10 mM reduced Glutathione, pH=8.0 in the elution buffer.

Storage Instruction

Store at -80°C. Aliquot to avoid repeated freezing and thawing.

Note

Best use within three months from the date of receipt of this protein.

Applications

- Enzyme-linked Immunoabsorbent Assay
- Western Blot (Recombinant protein)
- Antibody Production
- Protein Array

Gene Info — FEN1

Entrez GeneID [2237](#)

GeneBank Accession# [BC000323.1](#)

Protein Accession# [AAH00323](#)

Gene Name FEN1

Gene Alias FEN-1, MF1, RAD2

Gene Description flap structure-specific endonuclease 1

Omim ID [600393](#)

Gene Ontology [Hyperlink](#)

Gene Summary

The protein encoded by this gene removes 5' overhanging flaps in DNA repair and processes the 5' ends of Okazaki fragments in lagging strand DNA synthesis. Direct physical interaction between this protein and AP endonuclease 1 during long-patch base excision repair provides coordinated loading of the proteins onto the substrate, thus passing the substrate from one enzyme to another. The protein is a member of the XPG/RAD2 endonuclease family and is one of ten proteins essential for cell-free DNA replication. DNA secondary structure can inhibit flap processing at certain trinucleotide repeats in a length-dependent manner by concealing the 5' end of the flap that is necessary for both binding and cleavage by the protein encoded by this gene. Therefore, secondary structure can deter the protective function of this protein, leading to site-specific trinucleotide expansions. [provided by RefSeq]

Other Designations DNase IV|maturation factor-1

Pathway

- [Base excision repair](#)
- [DNA replication](#)
- [Non-homologous end-joining](#)

Disease

- [Breast cancer](#)
- [Breast Neoplasms](#)
- [Coronary Artery Disease](#)
- [DNA Damage](#)
- [Genetic Predisposition to Disease](#)
- [Graft vs Host Disease](#)
- [Head and Neck Neoplasms](#)
- [Huntington disease](#)
- [Lung Neoplasms](#)
- [Lupus Erythematosus](#)
- [Multiple Sclerosis](#)
- [Neoplasm Recurrence](#)
- [Neoplasms](#)