

# Recombinant human FEN1 protein

Catalog Number: ATGP0442

## PRODUCT INFORMATION

**Expression system**

E.coli

**Domain**

1-380aa

**UniProt No.**

P39748

**NCBI Accession No.**

NP\_004102.1

**Alternative Names**

Flap structure-specific endonuclease 1, FEN-1, MF1, RAD2, Flap structure-specific endonuclease 1 DNase IV, Flap endonuclease 1, Flap structure specific endonuclease 1, hFEN1, Maturation factor 1,

## PRODUCT SPECIFICATION

**Molecular Weight**

42.5 kDa (380aa) confirmed by MALDI-TOF

**Concentration**

1mg/ml (determined by Bradford assay)

**Formulation**

Liquid in. 20mM Tris-HCl buffer (pH 8.0) containing 1mM DTT 10% glycerol

**Purity**

> 90% by SDS-PAGE

**Tag**

Non-Tagged

**Application**

SDS-PAGE

**Storage Condition**

Can be stored at +2C to +8C for 1 week. For long term storage, aliquot and store at -20C to -80C. Avoid repeated freezing and thawing cycles.

## BACKGROUND

**Description**

FEN-1, also known as Flap structure-specific endonuclease 1, removes 5' overhanging flaps in DNA repair and processes the 5' ends of Okazaki fragments in lagging strand DNA synthesis. The protein is a member of the XPG/RAD2 endonuclease family and is one of ten proteins essential for cell-free DNA replication. FEN-1 is highly homologous to yeast Rad2. The C-terminal region of FEN-1 may bind to PCNA, thus allowing FEN-1 to function as an exonuclease in DNA replication. Recombinant human FEN-1 protein was expressed in E. coli and purified by

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using conventional chromatography techniques.

## Amino acid Sequence

MGIQGLAKLI ADVAPSAIRE NDIKSYFGRK VAIDASMSIY QFLIAVRQGG DVLQNEEGET TSHLMGMFYR TIRMMENGIK  
PVYVFDGKPP QLKSGELAKR SERRAEAEKQ LQQAQAAGAE QEVEKFTKRL VKVTKQHNDK CKHLLSLMGI PYLDAPSEAE  
ASCAALVKAG KVYAAATEDM DCLTFGSPVL MRHLTASEAK KLPIQEFHLS RILQELGLNQ EQFVDLCILL GSDYCESIRG  
IGPKRAVDLI QKHKSIEEIV RRLDPNKYPV PENWLHKEAH QLFLEPEVLD PESVELKWSE PNEEELIKFM CGEKQFSEER  
IRSGVKRLSK SRQGSTQGRL DDFFKVTGSL SSAKRKEPEP KGSTKKKAKT GAAGKFGRGK

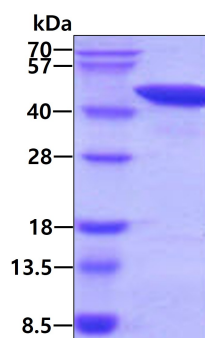
## General References

Hakoyama T., et al. (2009) Nature. 462(7272):514-7.

Lal A., et al. (2009) Mol Cell. 35(5):610-25.

## DATA

### SDS-PAGE



3ug by SDS-PAGE under reducing condition and visualized by coomassie blue stain.