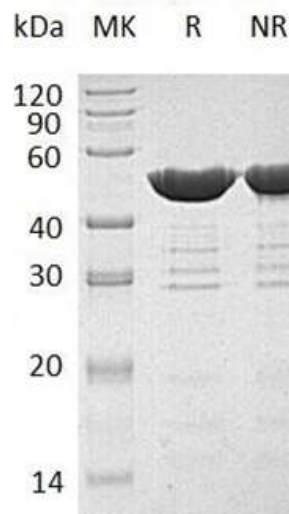


Recombinant Human FEN-1

Catalog No: C140

Description	Recombinant Human Flap Endonuclease 1 is produced by our E.coli expression system and the target gene encoding Met1-Lys380 is expressed.
Source	E.coli
Alternative name	Flap Endonuclease 1; FEN-1; DNase IV; Flap Structure-Specific Endonuclease 1; Maturation Factor 1; MF1; hFEN-1; FEN1; RAD2
Accession No.	P39748
Formulation	Supplied as a 0.2 µm filtered solution of 50 mM Tris, 50mM NaCl, 1mM DDT, 10% Glycerol, pH 8.0.
Quality Control	Purity: Greater than 95% as determined by reducing SDS-PAGE. Endotoxin: Less than 0.1 ng/µg (1 IEU/µg).
Shipping	The product is shipped on dry ice/polar packs. Upon receipt, store it immediately at the temperature listed below.
Storage	Store at < -20°C, stable for 6 months after receipt. Please minimize freeze-thaw cycles.
Amino Acid Sequence	<p>MGIQGLAKLIADVAPSAIRENDIKSYFGRKVAIDASMSIQFLIAVRQGGDVLQNEEGETTSHLMGMF</p> <p>YRTIRMMENGIKPVYV</p> <p>FDGKPPQLKSGELAKRSERRAEAEKQLQQAQAAGAEQEVEKFTKRLVKVTQHNDECKHLLSLMGI</p> <p>PYLDAPSEAEASCAALV</p> <p>KAGKVYAAATEDMDCLTFGSPVLMRHLTASEAKKLPIQEFHLSRILQELGLNQEQFV DLCILLGSDYC</p> <p>ESIRGIGPKRAVDLIQKH</p> <p>KSIEEIVRRLDPNKYPVPENWLHKEAHQLFLEPEVLDPESEVELKWSEPNEEELIKFMCGEKQFSEERI</p> <p>RSGVKRLSKSRQGSTQGR LDDFFKVTGSLSSAKRKEPEPKGSTKKKAKTGAAGKFKRGK</p>
Background	Flap Endonuclease 1 (FEN1) is a member of the XPG/RAD2 endonuclease family. During DNA replication, FEN1 cleaves the 5'-overhanging flap structure and processes the 5' ends of Okazaki fragments for synthesis. FEN1 also exhibits RNase H activity by possessing 5'-3' exonuclease activity on gapped double-stranded or nicked DNA, FEN1 is involved in the long patch base excision repair (LP-BER) pathway, it can cleave within the apurinic/apyrimidinic (AP) site-terminated flap. FEN1 can prevent flaps from equilibrating into structures that lead to duplications and deletions. FEN1 is also involved in replication and repair of rDNA and in repairing mitochondrial DNA.

SDS-PAGE



MK: Marker

R: Sample in reducing conditions

NR: Sample in non-reducing conditions