



Recombinant Protein Technical Manual

Recombinant Human Flap Endonuclease 1/FEN1 Protein RPES4182

Product Data:

Product SKU: RPES4182

Size: 10µg

Species: Human

Expression host: E. coli

Uniprot: P39748

Protein Information:

Molecular Mass: 42.6 kDa

AP Molecular Mass: 45 kDa

Tag:

Bio-activity:

Purity: > 90 % as determined by reducing SDS-PAGE.

Endotoxin: < 1.0 EU per µg as determined by the LAL method.

Storage: Store at < -20°C, stable for 6 months. Please minimize freeze-thaw cycles.

Shipping: This product is provided as liquid. It is shipped at frozen temperature with blue ice/gel packs. Upon receipt, store it immediately at < -20°C.

Formulation: Supplied as a 0.2 µm filtered solution of 50 mM Tris, 50mM NaCl, 1mM DDT, 10% Glycerol, pH 8.0.

Reconstitution: Please refer to the printed manual for detailed information.

Application:

Synonyms: Flap Endonuclease 1; FEN; DNase IV; Flap Structure-Specific Endonuclease 1; Maturation Factor 1; MF1; hFEN; FEN1; RAD2

Immunogen Information:

Sequence: Met 1-Lys380

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/aprimidinic (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.