

Product datasheet for **TP720121L**

FEN1 (NM_004111) Human Recombinant Protein

Product data:

Product Type:	Recombinant Proteins
Description:	Recombinant protein of human flap structure-specific endonuclease 1 (FEN1)
Species:	Human
Expression Host:	E. coli
Expression cDNA Clone or AA Sequence:	Met1-Lys380
Tag:	tag free
Predicted MW:	42.6 kDa
Concentration:	lot specific
Purity:	>95% as determined by SDS-PAGE and Coomassie blue staining
Buffer:	Provided lyophilized from a 0.2 µm filtered solution of 20 mM Tris-HCl, 150 mM NaCl
Endotoxin:	< 0.1 EU per µg protein as determined by LAL test
Storage:	Store at -80°C.
Stability:	Stable for at least 3 months from date of receipt under proper storage and handling conditions.
RefSeq:	NP_004102
Locus ID:	2237
UniProt ID:	P39748 , Q6FHX6
Cytogenetics:	11q12.2
Synonyms:	FEN-1; MF1; RAD2



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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, Jul 2008]

Protein Families:

Druggable Genome, Stem cell - Pluripotency

Protein Pathways:

Base excision repair, DNA replication, Non-homologous end-joining

Product images: