

KD-Validated Anti-Flap Structure-Specific Endonuclease 1 Rabbit Monoclonal Antibody

Rabbit monoclonal antibody

Catalog # AGI1863

Product Information

Application	WB, FC
Primary Accession	P39748
Reactivity	Rat, Human, Mouse
Clonality	Monoclonal
Isotype	Rabbit IgG
Clone Names	24GB4835
Calculated MW	42593
Gene Name	FEN1
Aliases	FEN1; Flap Structure-Specific Endonuclease 1; FEN-1; MF1; DNase IV; RAD2; Maturation Factor-1; Flap Endonuclease 1; Maturation Factor 1; EC 3.1.-.-; HFEN-1
Immunogen	A synthesized peptide derived from human FEN1

Additional Information

Gene ID	2237
Other Names	Flap endonuclease 1 {ECO:0000255 HAMAP-Rule:MF_03140}, FEN-1 {ECO:0000255 HAMAP-Rule:MF_03140}, 3.1.-.- {ECO:0000255 HAMAP-Rule:MF_03140}, DNase IV, Flap structure-specific endonuclease 1 {ECO:0000255 HAMAP-Rule:MF_03140}, Maturation factor 1, MF1, hFEN-1, FEN1 {ECO:0000255 HAMAP-Rule:MF_03140}, RAD2

Protein Information

Name	FEN1 {ECO:0000255 HAMAP-Rule:MF_03140}
Synonyms	RAD2
Function	Structure-specific nuclease with 5'-flap endonuclease and 5'-3' exonuclease activities involved in DNA replication and repair. During DNA replication, cleaves the 5'-overhanging flap structure that is generated by displacement synthesis when DNA polymerase encounters the 5'-end of a downstream Okazaki fragment. It enters the flap from the 5'-end and then tracks to cleave the flap base, leaving a nick for ligation. Also involved in the long patch base excision repair (LP-BER) pathway, by cleaving within the apurinic/apyrimidinic (AP) site-terminated flap. Acts as a genome stabilization factor that prevents flaps from equilibrating into structures that lead to duplications and deletions. Also possesses 5'-3' exonuclease activity on nicked or gapped double-stranded DNA, and exhibits RNase H activity. Also involved in

replication and repair of rDNA and in repairing mitochondrial DNA.

Cellular Location

[Isoform 1]: Nucleus, nucleolus. Nucleus, nucleoplasm. Note=Resides mostly in the nucleoli and relocalizes to the nucleoplasm upon DNA damage

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