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

Rabbit monoclonal antibody
Catalog # AGI1863

Specification

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

Application	**WB, FC**
Primary Accession	P39748
Reactivity	**Rat, Human, Mouse**
Clonality	**Monoclonal**
Isotype	**Rabbit IgG**
Calculated MW	**Predicted, 43 kDa, observed, 43 kDa KDa**
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**

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

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

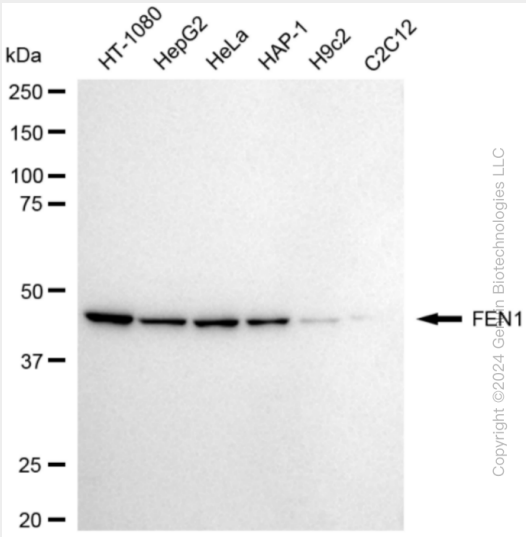
Cellular Location
[Isoform 1]: Nucleus, nucleolus. Nucleus, nucleoplasm. Note=Resides mostly in the nucleoli and relocalizes to the nucleoplasm upon DNA damage

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

Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

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



Western blotting analysis using anti-FEN1 antibody (Cat#AGI1863). Total cell lysates (30 µg) from various cell lines were loaded and separated by SDS-PAGE. The blot was incubated with anti-FEN1 antibody (Cat#AGI1863, 1:5,000) and HRP-conjugated goat anti-rabbit secondary antibody respectively.

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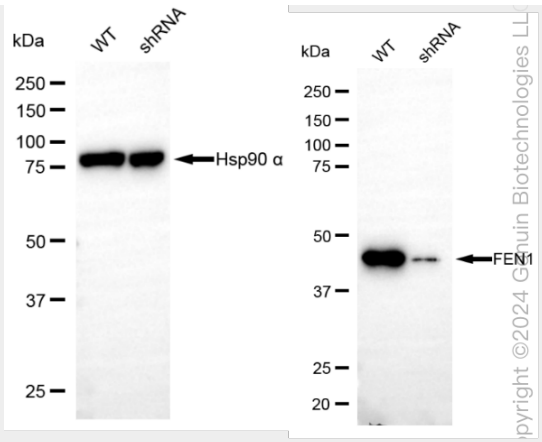
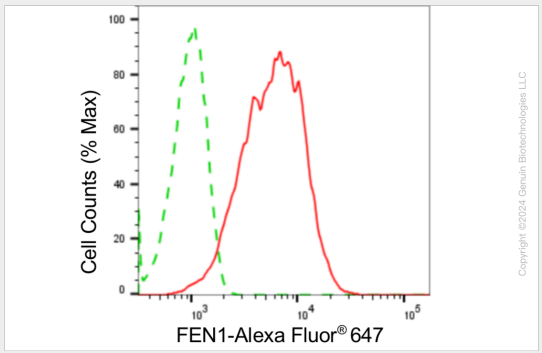


Western blotting analysis using anti-FEN1 antibody (Cat#AGI1863). FEN1 expression in wild-type (WT) and FEN1 shRNA knockdown (KD) HT-1080 cells with 20 µg of total cell lysates. Hsp90 α serves as a loading control. The blot was incubated with anti-FEN1 antibody (Cat#AGI1863, 1:5,000) and HRP-conjugated goat anti-rabbit secondary antibody respectively.



Flow cytometric analysis of FEN1 expression in HepG2 cells using anti-FEN1 antibody (Cat#AGI1863, 1:2,000). Green, isotype control; red, FEN1.