

**FEN-1 Antibody**  
**Purified Mouse Monoclonal Antibody (Mab)**  
**Catalog # AP52836****Specification**

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**FEN-1 Antibody - Product Information**

Application	WB, IP
Primary Accession	<a href="#">P39748</a>
Reactivity	Human, Mouse
Host	Mouse
Clonality	Monoclonal
Isotype	IgG1
Calculated MW	45 KDa

**FEN-1 Antibody - Additional Information****Gene ID** 2237**Other Names**

DNase IV;FEN-1;FEN1;FEN1\_HUMAN;Flap endonuclease 1;Flap structure specific endonuclease 1;Flap structure-specific endonuclease 1;hFEN-1;hFEN1;Maturation factor 1;MF1;Rad2.

**Dilution**

WB~~1:1000

IP~~1:500

**Format**

Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide, pH 7.3.

**Storage**

Store at 4°C short term. Aliquot and store at -20°C long term. Avoid freeze/thaw cycles.

**FEN-1 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

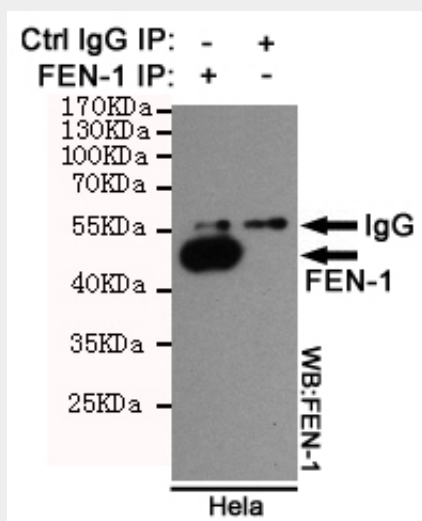
[Isoform 1]: Nucleus, nucleolus. Nucleus, nucleoplasm. Note=Resides mostly in the nucleoli and relocalizes to the nucleoplasm upon DNA damage

### FEN-1 Antibody - Protocols

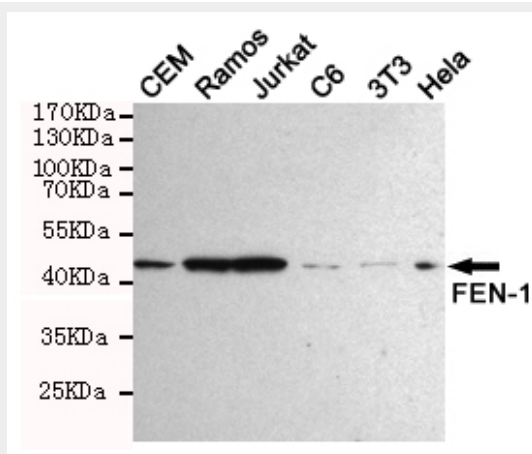
Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

### FEN-1 Antibody - Images



Immunoprecipitation analysis of HeLa cell lysates using FEN-1 mouse mAb.



Western blot detection of FEN-1 in Hela, Jurkat, 3T3, C6, CEM and Ramos cell lysates using FEN-1 mouse mAb (1:1000 diluted). Predicted band size: 45KDa. Observed band size: 45KDa.

### **FEN-1 Antibody - Background**

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.

### **FEN-1 Antibody - References**

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Hiraoka L.R., et al. Genomics 25:220-225(1995).  
Taylor T.D., et al. Nature 440:497-500(2006).  
Robins P., et al. J. Biol. Chem. 269:28535-28538(1994).  
Shen B., et al. J. Biol. Chem. 271:9173-9176(1996).