

### **FEN-1 Antibody**

Purified Mouse Monoclonal Antibody (Mab)
Catalog # AP52835

### **Specification**

### FEN-1 Antibody - Product Information

Application
Primary Accession
Reactivity
Host
Clonality
Isotype

P39748 Human, Mouse Mouse Monoclonal IgG1 45 KDa

WB, ICC

## FEN-1 Antibody - Additional Information

Gene ID 2237

Calculated MW

#### **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 ICC~~1:400

#### **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**

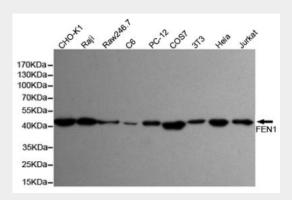
[Isoform 1]: Nucleus, nucleolus. Nucleus, nucleoplasm. Note=Resides mostly in the nucleoli and relocalizes to the nucleoplasm upon DNA damage

# **FEN-1 Antibody - Protocols**

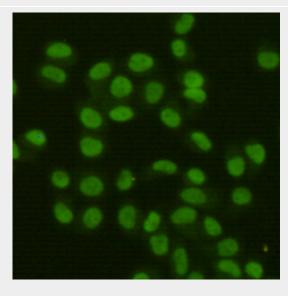
Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- <u>Immunohistochemistry</u>
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

# FEN-1 Antibody - Images



Western blot detection of FEN-1 in Hela, Jurkat, 3T3, COS7, PC-12, C6, Raw 264.7, Raji and CHO-K1 cell lysates using FEN-1 mouse mAb (1:1000 diluted). Predicted band size: 45 KDa. Observed band size: 45 KDa.





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Immunocytochemistry staining of HeLa cells fixed with 4% Paraformaldehyde and using FEN-1 mouse mAb (dilution 1:400).

# FEN-1 Antibody - Background

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# **FEN-1 Antibody - References**

Murray J.M., et al. Mol. Cell. Biol. 14:4878-4888(1994). 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).