

FEN-1 Antibody
Purified Mouse Monoclonal Antibody (Mab)
Catalog # AP52835

Specification

FEN-1 Antibody - Product Information

Application	WB, ICC
Primary Accession	P39748
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
ICC~~1:400

Format

Purified mouse monoclonal antibody in PBS(pH 7.4) containing with 0.02% sodium azide and 50% glycerol.

Storage

Store at -20 °C.Stable for 12 months from date of receipt

FEN-1 Antibody - Protein Information

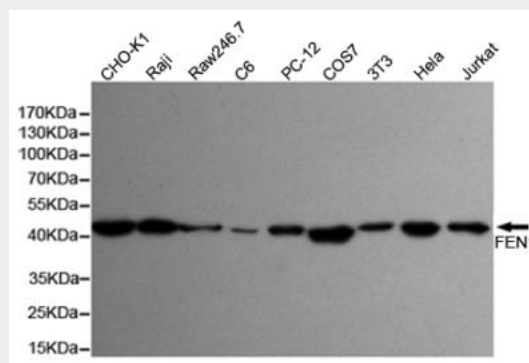
Name FEN1

{ECO:0000255|HAMAP-Rule:MF_03140}

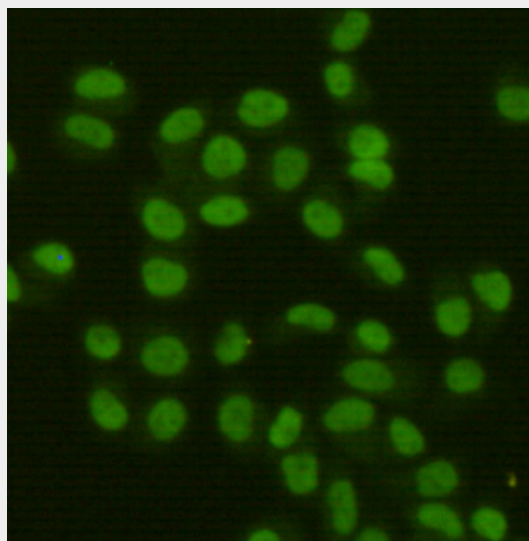
Synonyms RAD2

Function

Structure-specific nuclease with 5'-flap endonuclease and 5'- 3' exonuclease activities involved in DNA replication and



Western blot detection of FEN-1 in HeLa, Jurkat, 3T3, COS7, PC-12, C6, Raw264.7, Raji and CHO-K1 cell lysates using FEN-1 mouse mAb (1:1000 diluted). Predicted band size: 45KDa. Observed band size: 45KDa.



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

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

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/aprimidinic (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 relocates 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](#)

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/aprimidinic (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

- 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).