10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

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

Specification

FEN-1 Antibody - Product Information

Application	**IP, WB**
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
IP~~1:500
WB~~1:1000

Format
Purified mouse monoclonal antibody in PBS(pH 7.4) containing with 0.09% (W/V) 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 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.

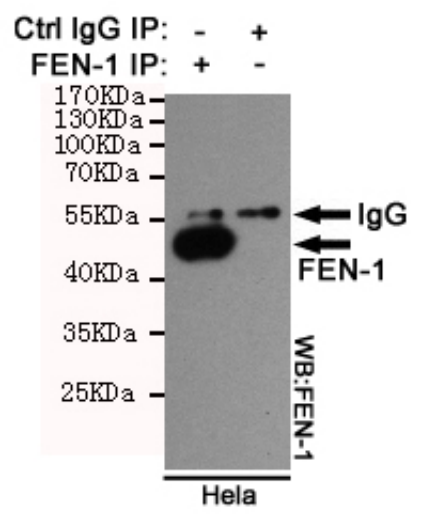
Cellular Location
[Isoform 1]: Nucleus, nucleolus. Nucleus, nucleoplasm. Note=Resides mostly in the nucleoli and relocalizes to the nucleoplasm upon DNA damage

FEN-1 Antibody - Protocols

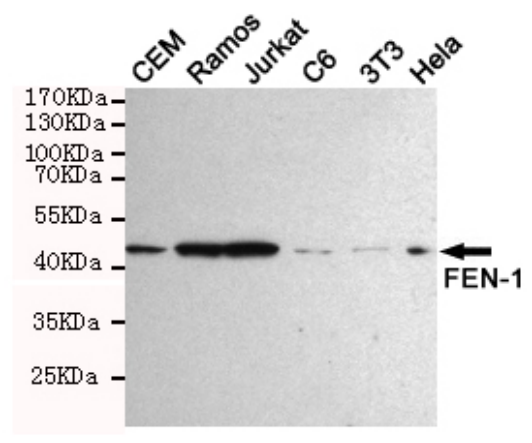
Provided below are standard protocols that you may find useful for product applications.

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

FEN-1 Antibody - Images



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



10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

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 structurs 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).