

**FEN1 Antibody**  
**Purified Rabbit Polyclonal Antibody (Pab)**  
**Catalog # AP50042**

**Specification**

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**FEN1 Antibody - Product Information**

Application	IF, WB, IHC
Primary Accession	<a href="#">P39748</a>
Reactivity	Human, Mouse, Rat
Host	Rabbit
Clonality	Polyclonal
Calculated MW	43,36 KDa
Antigen Region	107-132

**FEN1 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}, 31-- {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

**Dilution**

IF~~1:100  
WB~~ 1:1000  
IHC~~1:50-1:100

**Format**

Rabbit IgG in phosphate buffered saline (without Mg<sup>2+</sup> and Ca<sup>2+</sup>), pH 7.4, 150mM NaCl, 0.09% (W/V) sodium azide and 50% glycerol.

**Storage Conditions**

-20°C

**FEN1 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/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

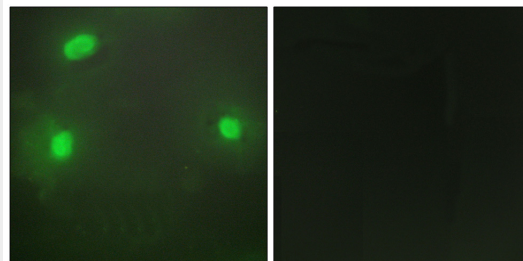
[Isoform 1]: Nucleus, nucleolus. Nucleus, nucleoplasm. Note=Resides mostly in the nucleoli and relocalizes to the nucleoplasm upon DNA damage

#### FEN1 Antibody - Protocols

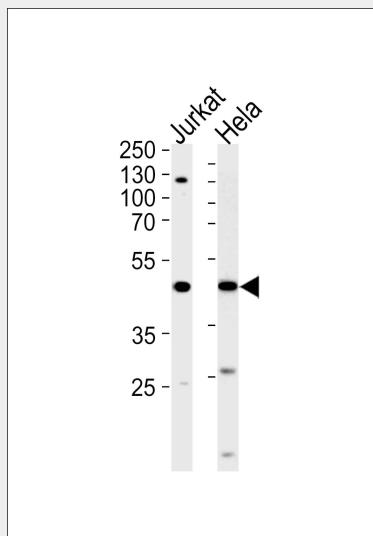
Provided below are standard protocols that you may find useful for product applications.

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

#### FEN1 Antibody - Images

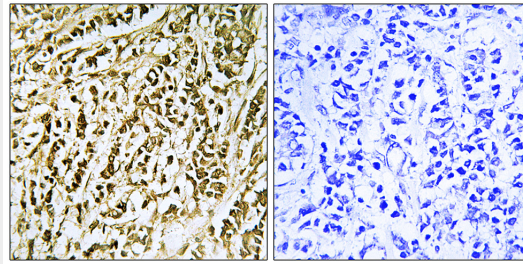


Immunofluorescence analysis of HeLa cells, using FEN1 antibody.



Western blot analysis of lysates from Jurkat, HeLa cell line (from left to right), using FEN1

Antibody(C10585). C10585 was diluted at 1:1000 at each lane. A goat anti-rabbit IgG H&L(HRP) at 1:5000 dilution was used as the secondary antibody. Lysates at 35ug per lane.



Immunohistochemistry analysis of paraffin-embedded human breast carcinoma tissue using FEN1 antibody.

### **FEN1 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.

### **FEN1 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).