

**Anti-FEN1 Antibody**  
**Rabbit polyclonal antibody to FEN1**  
**Catalog # AP59550****Specification**

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**Anti-FEN1 Antibody - Product Information**

Application	WB, IP, IF/IC, IHC
Primary Accession	<a href="#">P39748</a>
Other Accession	<a href="#">P39749</a>
Reactivity	Human, Mouse, Rat, Monkey
Host	Rabbit
Clonality	Polyclonal
Calculated MW	42593

**Anti-FEN1 Antibody - Additional Information****Gene ID** 2237**Other Names**

RAD2; Flap endonuclease 1; FEN-1; DNase IV; Flap structure-specific endonuclease 1; Maturation factor 1; MF1; hFEN-1

**Target/Specificity**

Recognizes endogenous levels of FEN1 protein.

**Dilution**

WB~~WB (1/500 - 1/1000), IH (1/100 - 1/200), IF/IC (1/100 - 1/500), IP (1/10 - 1/100)

IP~~N/A

IF/IC~~N/A

IHC~~1:100~500

**Format**

Liquid in 0.42% Potassium phosphate, 0.87% Sodium chloride, pH 7.3, 30% glycerol, and 0.09% (W/V) sodium azide.

**Storage**

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

**Anti-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/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

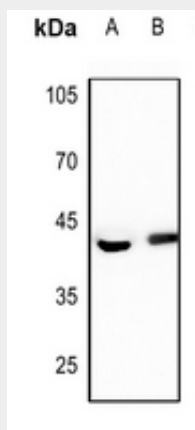
[Isoform 1]: Nucleus, nucleolus. Nucleus, nucleoplasm. Note=Resides mostly in the nucleoli and relocates to the nucleoplasm upon DNA damage

#### Anti-FEN1 Antibody - Protocols

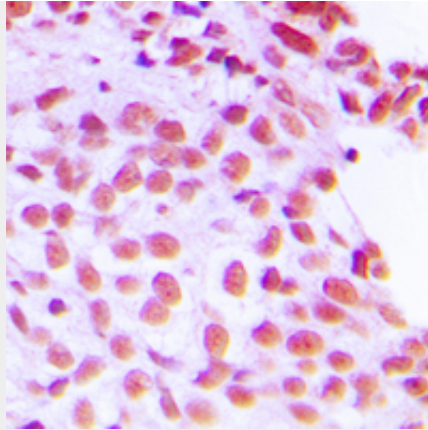
Provided below are standard protocols that you may find useful for product applications.

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

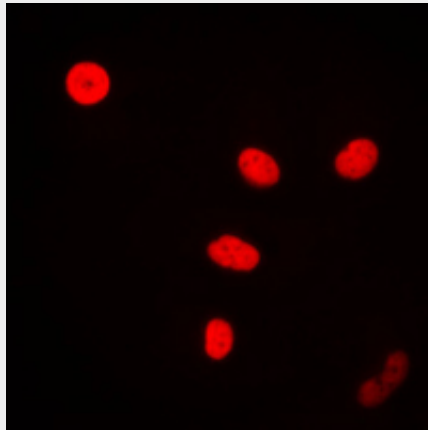
#### Anti-FEN1 Antibody - Images



Western blot analysis of FEN1 expression in HeLa (A), A375 (B) whole cell lysates.



Immunohistochemical analysis of FEN1 staining in human breast cancer formalin fixed paraffin embedded tissue section. The section was pre-treated using heat mediated antigen retrieval with sodium citrate buffer (pH 6.0). The section was then incubated with the antibody at room temperature and detected using an HRP conjugated compact polymer system. DAB was used as the chromogen. The section was then counterstained with haematoxylin and mounted with DPX.



Immunofluorescent analysis of FEN1 staining in MCF7 cells. Formalin-fixed cells were permeabilized with 0.1% Triton X-100 in TBS for 5-10 minutes and blocked with 3% BSA-PBS for 30 minutes at room temperature. Cells were probed with the primary antibody in 3% BSA-PBS and incubated overnight at 4 °C in a humidified chamber. Cells were washed with PBST and incubated with a DyLight 594-conjugated secondary antibody (red) in PBS at room temperature in the dark.

#### **Anti-FEN1 Antibody - Background**

KLH-conjugated synthetic peptide encompassing a sequence within the center region of human FEN1. The exact sequence is proprietary.