

Rabbit FEN1 Polyclonal Antibody | anti-FEN1 antibody

FEN1 Antibody

CATALOG #	HOST	REACTIVITY	APPLICATIONS
AAA323877	Rabbit	Human, Mouse, Rat	ELISA, Immunocytochemistry, Immunofluorescence, Immunohistochemistry, Western Blot

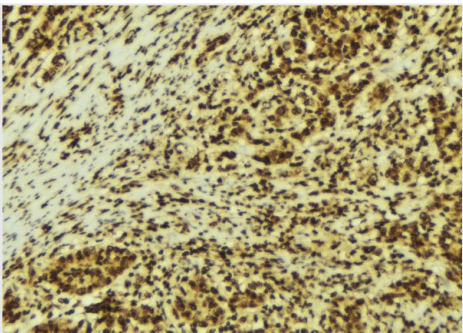
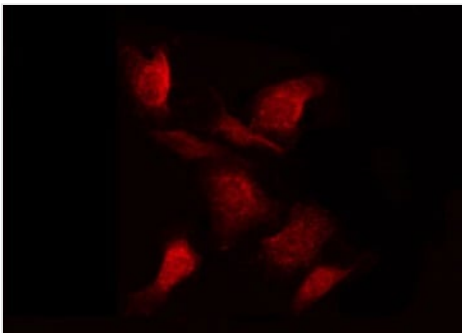
PRODUCT SYNONYMS

FEN1; Polyclonal Antibody; FEN1 Antibody; DNase IV; FEN-1; FEN1_HUMAN; Flap endonuclease 1; Flap structure specific endonuclease 1; Flap structure-specific endonuclease 1; hFEN-1; hFEN1; Maturation factor 1; MF1; Rad2; anti-FEN1 antibody

PRODUCT SPECIFICATIONS

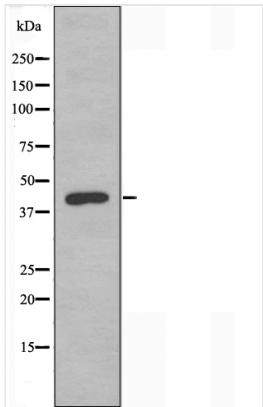
Host	Rabbit
Reactivity	Human, Mouse, Rat
Clonality	Polyclonal
Isotype	IgG
Specificity	FEN1 antibody detects endogenous levels of total FEN1
Purity/Purification	The antiserum was purified by peptide affinity chromatography using SulfoLink Coupling Resin.
Form/Format	Liquid Phosphate buffered saline, pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol.
Concentration	1mg/ml (varies by lot)
Sequence Length	380
Applicable Applications for anti-FEN1 antibody	ELISA, ICC (Immunocytochemistry), IF (Immunofluorescence), IHC (Immunohistochemistry), WB (Western Blot)
Immunogen	A synthesized peptide
Subcellular Location	Nucleus > Nucleolus. Nucleus > Nucleoplasm. Mitochondrion. Resides mostly in the nucleoli and relocalizes to the nucleoplasm upon DNA damage.
Conjugation	Unconjugated
Preparation and Storage	Store at -20 degree C. Stable for 12 months from date of receipt.

IMAGES



IF (Immunofluorescence)
AAA323877 staining Hela by IF/ICC. The sample were fixed with PFA and permeabilized in 0.1% Triton X-100, then blocked in 10% serum for 45 minutes at 25 degree C. The primary antibody was diluted at 1/200 and incubated with the sample for 1 hour at 37 degree C. An Alexa Fluor 594 conjugated goat anti-rabbit IgG (H+L) Ab, diluted at 1/600, was used as the secondary antibody.

IHC (Immunohistochemistry)
AAA323877 at 1/100 staining Human breast cancer tissue by IHC-P. The sample was formaldehyde fixed and a heat mediated antigen retrieval step in citrate buffer was performed. The sample was then blocked and incubated with the antibody for 1.5 hours at 22 degree C. An HRP conjugated goat anti-rabbit antibody was used as the secondary.



WB (Western Blot)
Western blot analysis of extracts from Jurkat cells using FEN1 antibody.

ADDITIONAL INFORMATION

Related Product Information for anti-FEN1 antibody

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.

Subunit Structure: Three molecules of FEN1 bind to one PCNA trimer with each molecule binding to one PCNA monomer (PubMed:15616578). PCNA stimulates the nuclease activity without altering cleavage specificity (PubMed:15616578). The C-terminal domain binds EP300; can bind simultaneously to both PCNA and EP300 (PubMed:11430825). Interacts with PCNA; can bind simultaneously to both PCNA and EP300 (PubMed:9305916, PubMed:11430825). Interacts with DDX11; this interaction is direct and increases flap endonuclease activity of FEN1 (PubMed:18499658).

Post-translational Modifications: Acetylated by EP300. Acetylation inhibits both endonuclease and exonuclease activity. Acetylation also reduces DNA-binding activity but does not affect interaction with PCNA or EP300. Phosphorylation upon DNA damage induces relocalization to the nuclear plasma. Phosphorylation at Ser-187 by CDK2 occurs during late S-phase and results in dissociation from PCNA. Methylation at Arg-192 by PRMT5 impedes Ser-187 phosphorylation and increases interaction with PCNA.

Similarity: Belongs to the XPG/RAD2 endonuclease family. FEN1 subfamily.

NCBI AND UNIPROT INFORMATION

NCBI GI # 4758356

NCBI GeneID	2237
NCBI Accession #	NP_004102.1
NCBI GenBank Nucleotide #	NM_004111.5
UniProt Accession #	P39748
Molecular Weight	Observed: 42 kD Predicted: 43 kDa
NCBI Official Full Name	flap endonuclease 1
NCBI Official Synonym Full Names	flap structure-specific endonuclease 1
NCBI Official Symbol	FEN1
NCBI Official Synonym Symbols	MF1; RAD2; FEN-1
NCBI Protein Information	flap endonuclease 1
UniProt Protein Name	Flap endonuclease 1
UniProt Gene Name	FEN1
UniProt Synonym Gene Names	RAD2; FEN-1

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.

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Online datasheet: <https://stage.aaabiotech.com/polyclonal/fen1-antibody-immunocytochemistry-immunofluorescence-immunohistochemistry-western-blot-elisa/323877>