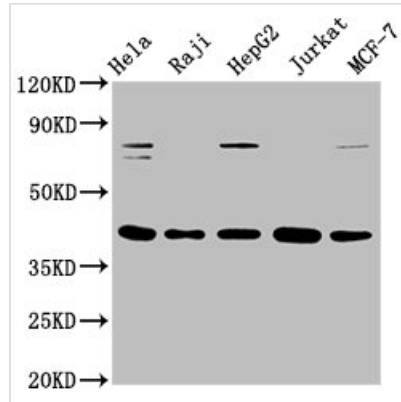




# FEN1 Antibody

<b>Product Code</b>	CSB-RA008585A0HU
<b>Abbreviation</b>	Flap endonuclease 1
<b>Storage</b>	Upon receipt, store at -20°C or -80°C. Avoid repeated freeze.
<b>Uniprot No.</b>	P39748
<b>Immunogen</b>	A synthesized peptide derived from human FEN1
<b>Species Reactivity</b>	Human
<b>Tested Applications</b>	ELISA, WB, IHC, IF; Recommended dilution: WB:1:500-1:5000, IHC:1:50-1:200, IF:1:20-1:200
<b>Relevance</b>	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.
<b>Form</b>	Liquid
<b>Conjugate</b>	Non-conjugated
<b>Storage Buffer</b>	Rabbit IgG in phosphate buffered saline , pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol.
<b>Purification Method</b>	Affinity-chromatography
<b>Isotype</b>	Rabbit IgG
<b>Clonality</b>	Monoclonal
<b>Alias</b>	Flap endonuclease 1UniRule annotation, DNase IV, Flap structure-specific endonuclease 1UniRule annotation, FEN1
<b>Immunogen Species</b>	Homo sapiens (Human)
<b>Research Area</b>	Epigenetics and Nuclear Signaling
<b>Gene Names</b>	FEN1
<b>Accession NO.</b>	4D9

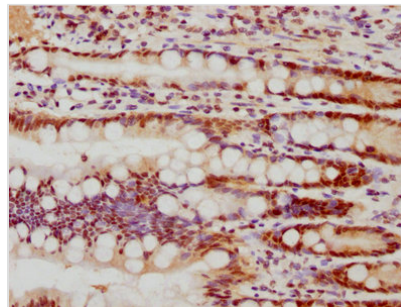
Image


**Western Blot**

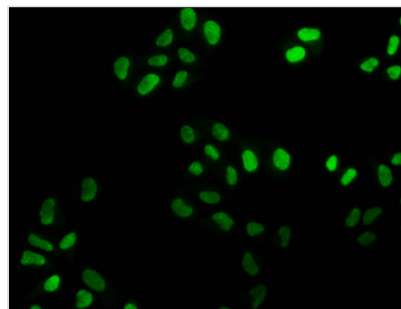
Positive WB detected in: HeLa whole cell lysate, Raji whole cell lysate, HepG2 whole cell lysate, Jurkat whole cell lysate, MCF-7 whole cell lysate  
All lanes: FEN1 antibody at 0.775 $\mu$ g/ml

**Secondary**

Goat polyclonal to rabbit IgG at 1/50000 dilution  
Predicted band size: 43, 36 KDa  
Observed band size: 43 KDa



IHC image of CSB-RA008585A0HU diluted at 1:77.5 and staining in paraffin-embedded human small intestine tissue performed on a Leica Bond<sup>TM</sup> system. After dewaxing and hydration, antigen retrieval was mediated by high pressure in a citrate buffer (pH 6.0). Section was blocked with 10% normal goat serum 30min at RT. Then primary antibody (1% BSA) was incubated at 4°C overnight. The primary is detected by a biotinylated secondary antibody and visualized using an HRP conjugated SP system.



Immunofluorescence staining of HeLa cells with CSB-RA008585A0HU at 1:25, counter-stained with DAPI. The cells were fixed in 4% formaldehyde, permeabilized using 0.2% Triton X-100 and blocked in 10% normal Goat Serum. The cells were then incubated with the antibody overnight at 4°C. The secondary antibody was Alexa Fluor 488-conjugated AffiniPure Goat Anti-Rabbit IgG (H+L).

**Description**

This FEN1 antibody is a recombinant monoclonal antibody. Its production process includes the cloning of the human FEN1 DNA gene into the vector and subsequent transfection of the clones into the cell line for in vitro expression. It can react with human FEN1 protein. It is purified using affinity-chromatography. This FEN1 recombinant antibody has been validated in multiple applications, including ELISA, WB, IHC, and IF.

FEN1 is a structure-specific endonuclease that recognizes the specific flap intermediate containing both a several-nucleotide long 5'-flap and a one-nucleotide 3'-tail. Stimulated by interaction with PCNA, FEN1 cleaves this intermediate to produce a nick ligated into a contiguous lagging strand. As a genome stabilization factor, FEN1 prevents flaps from equilibrating into structures that lead to duplications and deletions. FEN1 plays important roles both in DNA replication and in base excision repair (BER).