

# Anti-FEN1 antibody ab153825

[2 References](#) [5 Images](#)

## Overview

|                            |   |
|----------------------------|---|
| <b>Product name</b>        | Anti-FEN1 antibody  |
| <b>Description</b>         | Rabbit polyclonal to FEN1   |
| <b>Host species</b>        | Rabbit  |
| <b>Tested applications</b> | <b>Suitable for:</b> WB, IHC-P, ICC/IF  |
| <b>Species reactivity</b>  | <b>Reacts with:</b> Mouse, Rat, Human   |
| <b>Immunogen</b>           | Recombinant fragment corresponding to a region within amino acids 169 and 380 of Human FEN1 (UniProt: P39748).  |
| <b>Positive control</b>    | Recombinant Human FEN1 protein ( <a href="#">ab95382</a> ) can be used as a positive control in WB. HepG2, NIH 3T3, JC, BCL1, Raw264.7 and PC12 whole cell lysates; A549 cells; A549 xenograft tissue.  |
| <b>General notes</b>       | <p>The Life Science industry has been in the grips of a reproducibility crisis for a number of years. Abcam is leading the way in addressing this with our range of recombinant monoclonal antibodies and knockout edited cell lines for gold-standard validation. Please check that this product meets your needs before purchasing.</p> <p>If you have any questions, special requirements or concerns, please send us an inquiry and/or contact our Support team ahead of purchase. Recommended alternatives for this product can be found below, along with publications, customer reviews and Q&amp;As</p> |

## Properties

|                             |  |
|-----------------------------|--|
| <b>Form</b>                 | Liquid   |
| <b>Storage instructions</b> | Shipped at 4°C. Upon delivery aliquot. Store at -20°C or -80°C. Avoid freeze / thaw cycle.   |
| <b>Storage buffer</b>       | <p>pH: 7.00</p> <p>Preservative: 0.01% Thimerosal (merthiolate)</p> <p>Constituents: 1.21% Tris, 0.75% Glycine, 10% Glycerol (glycerin, glycerine)</p> |
| <b>Purity</b>               | Immunogen affinity purified  |
| <b>Clonality</b>            | Polyclonal   |
| <b>Isotype</b>              | IgG  |

## Applications

## The Abpromise guarantee

Our **Abpromise guarantee** covers the use of ab153825 in the following tested applications.

The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

| Application | Abreviews | Notes   |
|-------------|-----------|---|
| WB          |           | 1/500 - 1/3000. Predicted molecular weight: 43 kDa.   |
| IHC-P       |           | 1/100 - 1/1000. Perform heat mediated antigen retrieval before commencing with IHC staining protocol using heat mediated 10mM Citrate buffer (pH6.0) or Tris-EDTA buffer (pH8.0). |
| ICC/IF      |           | 1/100 - 1/1000.   |

## Target

### 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.

### Sequence similarities

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

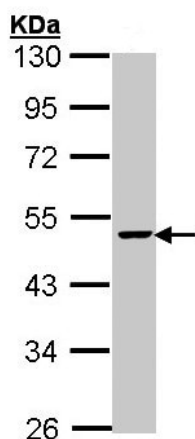
### Post-translational modifications

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.

### Cellular localization

Nucleus > nucleolus. Nucleus > nucleoplasm. Mitochondrion. Resides mostly in the nucleoli and relocalizes to the nucleoplasm upon DNA damage.

## Images

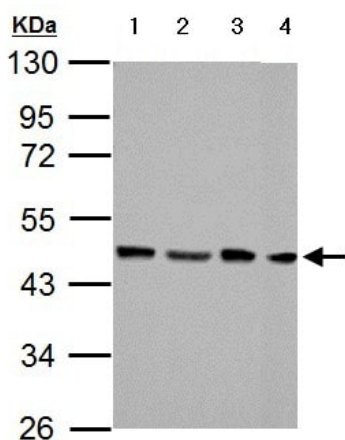


Western blot - Anti-FEN1 antibody (ab153825)

Anti-FEN1 antibody (ab153825) at 1/1000 dilution + HepG2 whole cell lysate at 30 µg

**Predicted band size:** 43 kDa

10% SDS PAGE



Western blot - Anti-FEN1 antibody (ab153825)

**All lanes :** Anti-FEN1 antibody (ab153825) at 1/1000 dilution

**Lane 1 :** NIH 3T3 whole cell lysate

**Lane 2 :** JC whole cell lysate

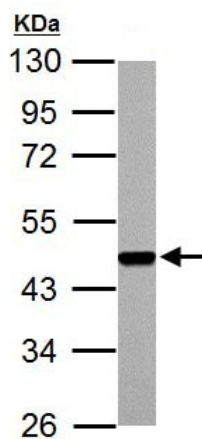
**Lane 3 :** BCL1 whole cell lysate

**Lane 4 :** Raw264.7 whole cell lysate

Lysates/proteins at 30 µg per lane.

**Predicted band size:** 43 kDa

10% SDS-PAGE

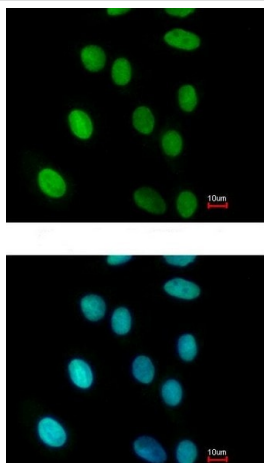


Western blot - Anti-FEN1 antibody (ab153825)

Anti-FEN1 antibody (ab153825) at 1/1000 dilution + PC12 whole cell lysate at 30 µg

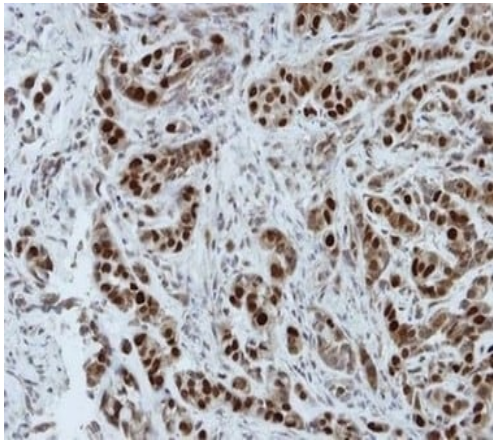
**Predicted band size:** 43 kDa

10% SDS-PAGE



Immunocytochemistry/ Immunofluorescence - Anti-FEN1 antibody (ab153825)

Immunofluorescence analysis of paraformaldehyde fixed A549 cells labeling FEN1 with ab153825 at 1/200. The lower panel is merged with DNA probe.



Immunohistochemical analysis of paraffin embedded A549 xenograft tissue labeling FEN1 with ab153825 at 1/100.

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-FEN1 antibody (ab153825)

**Please note:** All products are "FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC PROCEDURES"

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