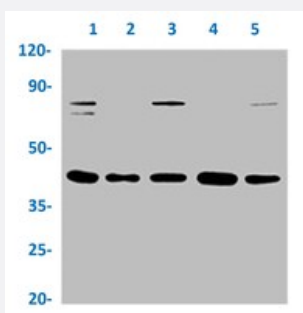


RecomAb™

# FEN1 recombinant monoclonal antibody, clone 4D9

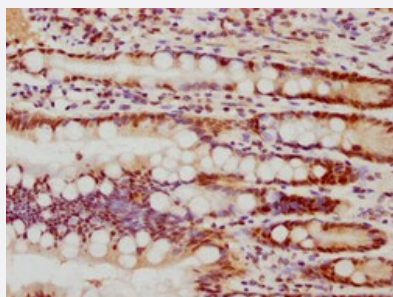
Catalog # RAB04338      Size 100 uL

## Applications



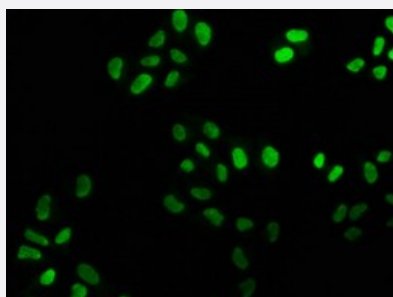
### Western Blot

Western blot analysis of Lane 1: HeLa whole cell lysate, Lane 2: Reji whole cell lysate, Lane 3: HepG2 whole cell lysate, Lane 4: Jurkat whole cell lysate and Lane 5: MCF-7 whole cell lysate with FEN1 recombinant monoclonal antibody, clone 4D9 (Cat # RAB04338).



### Immunohistochemistry

Immunohistochemical staining of human small intestine tissue with FEN1 recombinant monoclonal antibody, clone 4D9 (Cat # RAB04338) (diluted at 1:77.5).



### Immunofluorescence

Immunofluorescent staining of HeLa cells with FEN1 recombinant monoclonal antibody, clone 4D9 (Cat # RAB04338) (diluted at 1:25). The secondary antibody was Alexa Fluor 488-conjugated goat anti-rabbit IgG (green). Counter-stain DAPI was used (blue).

## Specification

### Product Description

Rabbit recombinant monoclonal antibody raised against human FEN1.

<b>Antibody Species</b>	Rabbit
<b>Immunogen</b>	Original antibody is raised against a synthetic peptide corresponding to human FEN1.
<b>Theoretical MW (kDa)</b>	Calculated MW: 43, 3
<b>Reactivity</b>	Human
<b>Form</b>	Liquid
<b>Purification</b>	Affinity chromatography
<b>Isotype</b>	IgG
<b>Recommend Usage</b>	ELISA Immunofluorescence (1:20-1:200) Immunohistochemistry (1:50-1:200) Western Blot (1:500-1:5000) The optimal working dilution should be determined by the end user.
<b>Storage Buffer</b>	In PBS, pH7.4 (150mM NaCl, 50% glycerol and 0.02% sodium azide)
<b>Storage Instruction</b>	Store at -20 °C or -80 °C. Aliquot to avoid repeated freezing and thawing.
<b>Note</b>	This product contains sodium azide: a POISONOUS AND HAZARDOUS SUBSTANCE which should be handled by trained staff only.

## Applications

- Western Blot

Western blot analysis of Lane 1: Hela whole cell lysate, Lane 2: Reji whole cell lysate, Lane 3: HepG2 whole cell lysate, Lane 4: Jurkat whole cell lysate and Lane 5: MCF-7 whole cell lysate with FEN1 recombinant monoclonal antibody, clone 4D9 (Cat # RAB04338).

- Immunohistochemistry

Immunohistochemical staining of human small intestine tissue with FEN1 recombinant monoclonal antibody, clone 4D9 (Cat # RAB04338) (diluted at 1:77.5).

- Immunofluorescence

Immunofluorescent staining of Hela cells with FEN1 recombinant monoclonal antibody, clone 4D9 (Cat # RAB04338) (diluted at 1:25). The secondary antibody was Alexa Fluor 488-conjugated goat anti-rabbit IgG (green). Counter-stain DAPI was used (blue).

- Enzyme-linked Immunoabsorbent Assay

## Gene Info — FEN1

Entrez GeneID [2237](#)

Protein Accession# [P39748](#)

Gene Name FEN1

Gene Alias FEN-1, MF1, RAD2

Gene Description flap structure-specific endonuclease 1

Omim ID [600393](#)

Gene Ontology [Hyperlink](#)

**Gene Summary**

The protein encoded by this gene removes 5' overhanging flaps in DNA repair and processes the 5' ends of Okazaki fragments in lagging strand DNA synthesis. Direct physical interaction between this protein and AP endonuclease 1 during long-patch base excision repair provides coordinated loading of the proteins onto the substrate, thus passing the substrate from one enzyme to another. The protein is a member of the XPG/RAD2 endonuclease family and is one of ten proteins essential for cell-free DNA replication. DNA secondary structure can inhibit flap processing at certain trinucleotide repeats in a length-dependent manner by concealing the 5' end of the flap that is necessary for both binding and cleavage by the protein encoded by this gene. Therefore, secondary structure can deter the protective function of this protein, leading to site-specific trinucleotide expansions. [provided by RefSeq]

**Other Designations** DNase IV|maturation factor-1

## Pathway

- [Base excision repair](#)
- [DNA replication](#)
- [Non-homologous end-joining](#)

## Disease

- [Breast cancer](#)
- [Breast Neoplasms](#)
- [Coronary Artery Disease](#)
- [DNA Damage](#)

- [Genetic Predisposition to Disease](#)
- [Graft vs Host Disease](#)
- [Head and Neck Neoplasms](#)
- [Huntington disease](#)
- [Lung Neoplasms](#)
- [Lupus Erythematosus](#)
- [Multiple Sclerosis](#)
- [Neoplasm Recurrence](#)
- [Neoplasms](#)