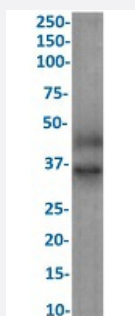


RecomAb™

# FEN1 recombinant monoclonal antibody, clone SAIC-21C-4

Catalog # RAB03447      Size 200 ug

## Applications



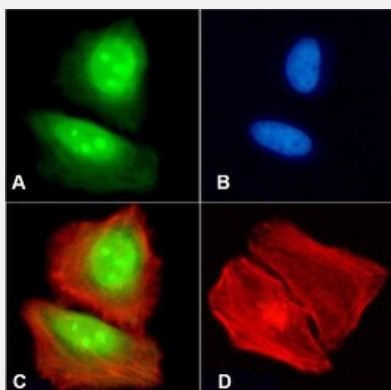
### Western Blot

Western blot analysis of human colon tissue with FEN1 recombinant monoclonal antibody, clone SAIC-21C-4 (Cat # RAB03447). Western Blot analysis the tissue lysates (35 ug protein in RIPA buffer) were resolved on a SDS PAGE gel and blots were probed with the chimeric rsion of RAB03447 at 1 ug/mL before detection using an anti-rondary antibody. A primary incubation of 1h was used and protein was detected by chemiluminescence.

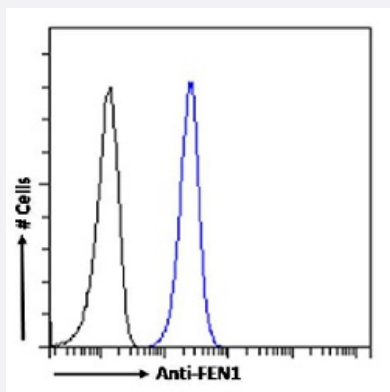
### Immunofluorescence

Immunofluorescent staining of Hela cells with FEN1 recombinant monoclonal antibody, clone SAIC-21C-4 (Cat # RAB03447).

Immunofluorescence analysis of paraformaldehyde fixed Hela cells, permeabilized with 0.15% Triton stained with the chimeric r version of RAB03447 at a dilution of 1:100 for 1h followed by Alexa Fluor® 488 secondary antibody at a dilution of 1:1500, showing nucleoli and nuclear staining. Actin filaments were stained with phalloidin (red) and the nuclear stain is DAPI (blue). The isotype control was stained with an unknown specificity antibody followed by Alexa Fluor® 488 secondary antibody.



- (A) RAB03447
- (B) DAPI
- (C) Merged channels
- (D) Isotype control



## Flow Cytometry

Flow cytometric analysis of Hela cells with the FEN1 recombinant monoclonal antibody, clone SAIC-21C-4 (Cat # RAB03447).

Hela cells permeabilized with 0.5% Triton were stained with anti-unknown specificity antibody (isotype control-black line) or the r version of RAB03447 (blue line) at a dilution of 1:100 for 1h at RT. After washing the bound antibody was detected using a goat anti-r AlexaFluor® 488 antibody at a dilution of 1:1000 and cells analyzed using a FACSCanto flow-cytometer.

## Specification

**Product Description** Rabbit recombinant monoclonal antibody raised against human FEN1.

**Antibody Species** Rabbit

**Immunogen** Original antibody is raised against the KLH-cojugated peptide "SIEEIVR".

**Reactivity** Human

**Form** Liquid

**Isotype** IgG

**Recommend Usage**  
Flow Cytometry  
Immunofluorescence  
Immuno-MRM  
Western Blot  
The optimal working dilution should be determined by the end user.

**Storage Buffer** In PBS with 0.02% Proclin 300

**Storage Instruction** Store at 4°C for up to 3 months. For longer storage, aliquot and store at -20°C. Aliquot to avoid repeated freezing and thawing.

## Applications

### ● Western Blot

Western blot analysis of human colon tissue with FEN1 recombinant monoclonal antibody, clone SAIC-21C-4 (Cat # RAB03447). Western Blot analysis the tissue lysates (35 ug protein in RIPA buffer) were resolved on a SDS PAGE gel and blots were probed with the chimeric rsion of RAB03447 at 1 ug/mL before detection using an anti-rondary antibody. A primary incubation of 1h was used and protein was detected by chemiluminescence.

- Immunofluorescence

Immunofluorescent staining of HeLa cells with FEN1 recombinant monoclonal antibody, clone SAIC-21C-4 (Cat # RAB03447). Immunofluorescence analysis of paraformaldehyde fixed HeLa cells, permeabilized with 0.15% Triton stained with the chimeric r version of RAB03447 at a dilution of 1:100 for 1h followed by Alexa Fluor® 488 secondary antibody at a dilution of 1:1500, showing nucleoli and nuclear staining. Actin filaments were stained with phalloidin (red) and the nuclear stain is DAPI (blue). The isotype control was stained with an unknown specificity antibody followed by Alexa Fluor® 488 secondary antibody.

- (A) RAB03447
- (B) DAPI
- (C) Merged channels
- (D) Isotype control

- Flow Cytometry

Flow cytometric analysis of HeLa cells with the FEN1 recombinant monoclonal antibody, clone SAIC-21C-4 (Cat # RAB03447). HeLa cells permeabilized with 0.5% Triton were stained with anti-unknown specificity antibody (isotype control-black line) or the r version of RAB03447 (blue line) at a dilution of 1:100 for 1h at RT. After washing the bound antibody was detected using a goat anti-r AlexaFluor® 488 antibody at a dilution of 1:1000 and cells analyzed using a FACSCanto flow-cytometer.

- Immuno-MRM (multiple reaction monitoring)

## Gene Info — FEN1

Entrez GeneID [2237](#)

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](#)