

RACO0167

Product Information

Size:

50ul

Reactivity:

Human

Source:

Human

Isotype:

Rabbit IgG

Applications:

ELISA, WB, IHC, IF

Recommended dilutions:

WB:1:500-1:5000, IHC:1:50-1:200, IF:1:20-1:200

Protein Background:

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.

Gene ID:

FEN1

Uniprot

P39748

Synonyms:

Flap endonuclease 1UniRule annotation, DNase IV, Flap structure-specific endonuclease 1UniRule annotation, FEN1

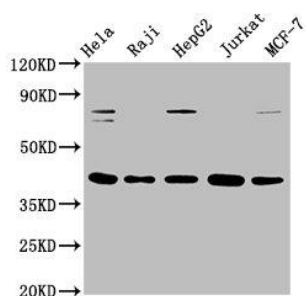
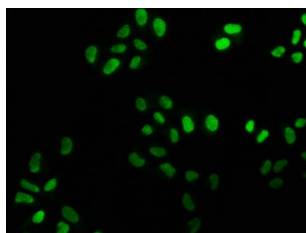
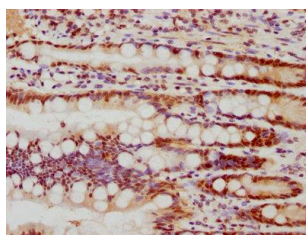
Immunogen:

A synthesized peptide derived from human FEN1.

Storage:

Rabbit IgG in phosphate buffered saline , pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol.

Product Images



IHC image of RACO0167 diluted at 1:77.5 and staining in paraffin-embedded human small intestine tissue performed on a Leica Bond™ 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 RACO0167 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).

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 0.775µg/ml

Secondary

Goat polyclonal to rabbit IgG at 1:50000 dilution

Predicted band size: 43, 36 KDa

Observed band size: 43 KDa