## For Research Use Only

## FEN1 Recombinant antibody

Catalog Number:84916-5-RR



**Basic Information** 

Catalog Number: GenBank Accession Number: **Purification Method:** 84916-5-RR BC000323 Protein A purification

GeneID (NCBI): Size: CloneNo.: 100ul, Concentration: 1000 ug/ml by 2237 242330C10

Nanodrop: **UNIPROT ID:** Recommended Dilutions: P39748 WB 1:5000-1:50000 Rabbit IHC 1:500-1:2000 Full Name: flap structure-specific endonuclease 1 IF/ICC 1:250-1:1000 Isotype:

IgG Calculated MW:

Immunogen Catalog Number: 43 kDa

AG6552 Observed MW:

48 kDa

**Applications** 

**Tested Applications:** 

WB, IHC, IF/ICC, FC (Intra), ELISA

Species Specificity:

human, mouse

Note-IHC: suggested antigen retrieval with TE buffer pH 9.0; (\*) Alternatively, antigen retrieval may be performed with citrate

buffer pH 6.0

Positive Controls:

WB: A431 cells, Jurkat cells, HeLa cells, U-937 cells, Y79 cells, NIH/3T3 cells, mouse testis tissue

IHC: human colon cancer tissue, IF/ICC: NIH/3T3 cells, HeLa cells

## **Background Information**

FEN1(Flap endonuclease-1) is the prototypical member of the 5'-nuclease superfamily, whose activities span a range of cellular pathways involved in DNA replication and genome maintenance (PMID: 22118811, 21496641, 20929870). FEN1 is a structure-selective metallonuclease essential for Okazaki fragment maturation through efficient removal of 5' flaps resulting from strand displacement during lagging-strand synthesis (PMID: 8144677, 9081985). FEN1 is overexpressed in multiple cancer types, and has been suggested both as a biomarker relating to prognosis and disease progression and as a potential therapeutic target (PMID: 19010819, 16879693, 19596913, 27526030).

Storage

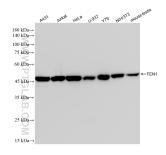
Store at -20°C. Stable for one year after shipment.

PBS with 0.02% sodium azide and 50% glycerol pH 7.3.

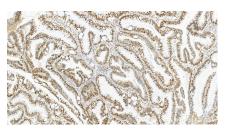
Aliquoting is unnecessary for -20°C storage

\*\*\* 20ul sizes contain 0.1% BSA

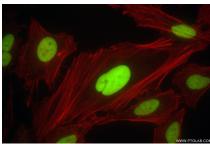
## **Selected Validation Data**



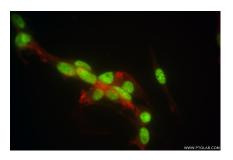
Various lysates were subjected to SDS PAGE followed by western blot with 84916-5-RR (FEN1 antibody) at dilution of 1:10000 incubated at room temperature for 1.5 hours.



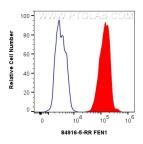
Immunohistochemical analysis of paraffinembedded human colon cancer tissue slide using 84916-5-RR (FEN1 antibody) at dilution of 1:1000 (under 20x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



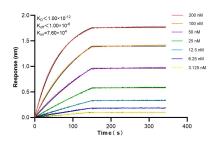
Immunofluorescent analysis of (4% PFA) fixed HeLa cells using FEN1 antibody (84916-5-RR, Clone: 242330C10) at dilution of 1:500 and CoraLite®488-Conjugated Goat Anti-Rabbit IgG(H+L) (SA00013-2), CL594-Phalloidin (red).



Immunofluorescent analysis of (4% PFA) fixed NIH/3T3 cells using FEN1 antibody (84916-5-RR, Clone: 242330C10) at dilution of 1:500 and CoraLite® 488-Conjugated Goat Anti-Rabbit IgG(H+L) (SA00013-2), CL594-Phalloidin (red).



1x10^6 HeLa cells were intracellularly stained with 0.25 ug FEN1 Recombinant antibody (84916-5-RR, Clone:242330C10) and CoraLite® 488-Conjugated Goat Anti-Rabbit 1gG(H+L) (5A00013-2)(red), or 0.25 ug Rabbit 1gG Isotype Control Recold (98136-1-RR, Clone: 240953C9) (blue). Cells were fixed and permeabilized with Transcription Factor Staining Buffer Kit (PF00011).



Biolayer interferometry (BLI) kinetic assays of 84916-5-RR against Human FEN1 were performed. The affinity constant is below 1 pM.