For Research Use Only

FEN1 Polyclonal antibody

Catalog Number:14768-1-AP 13 Publications

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Basic Information

Catalog Number:
14768-1-AP

Concentration:
500 ug/ml

Source:
Rabbit

Isotype:
IgG

Immunogen Catalog Number:
AG6552

GenBank Accession Number:
BC000323

GeneID (NCBI):
2237

UNIPROT ID:
P39748

Full Name:
flap structure-specific endonuclease 1

Calculated MW:
43 kDa

Observed MW:
48 kDa

Purification Method:
Antigen affinity purification

Recommended Dilutions:
WB: 1:1000-1:4000
IP: 0.5-4.0 ug for 1.0-3.0 mg of total protein lysate
IHC: 1:50-1:500
IF/ICC: 1:200-1:800

Applications

Tested Applications:
WB, IHC, IF/ICC, IP, ELISA

Cited Applications:
WB, IHC, IF, IP

Species Specificity:
human, mouse

Cited Species:
human, mouse, rat

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 : HeLa cells, NIH/3T3 cells

IP : NIH/3T3 cells,

IHC : human colon cancer tissue, human lung cancer tissue, mouse ovary tissue, mouse small intestine tissue

IF/ICC : NIH/3T3 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).

Notable Publications

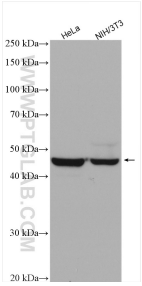
Author	Pubmed ID	Journal	Application
Xiaoli Xu	30184152	J Mol Cell Biol	WB
Shaozu Fu	35613597	Cell Rep	WB
Megha Jhanji	35688816	Nat Commun	WB

Storage

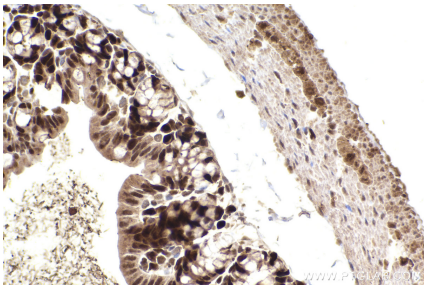
Storage:
Store at -20°C. Stable for one year after shipment.
Storage Buffer:
PBS with 0.02% sodium azide and 50% glycerol, pH7.3
Aliquoting is unnecessary for -20°C storage

For technical support and original validation data for this product please contact:
T: 4006900926 E: Proteintech-CN@ptglab.com W: ptgcn.com

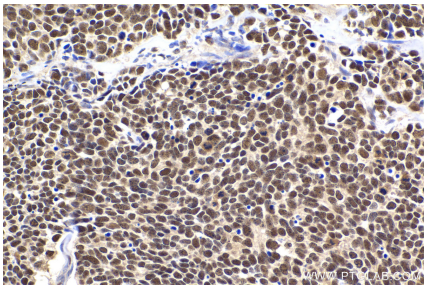
Selected Validation Data



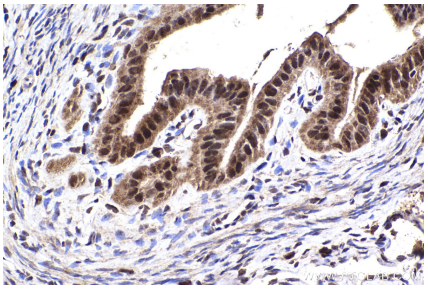
Various lysates were subjected to SDS PAGE followed by western blot with 14768-1-AP (FEN1 antibody) at dilution of 1:2000 incubated at room temperature for 1.5 hours.



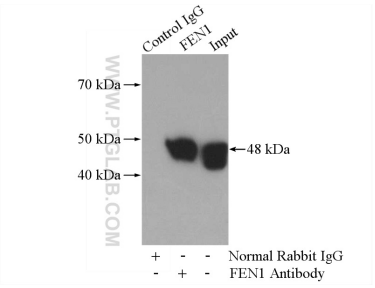
Immunohistochemical analysis of paraffin-embedded mouse small intestine tissue slide using 14768-1-AP (FEN1 antibody) at dilution of 1:1000 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



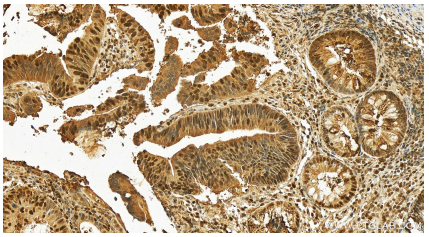
Immunohistochemical analysis of paraffin-embedded human lung cancer tissue slide using 14768-1-AP (FEN1 antibody) at dilution of 1:1000 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



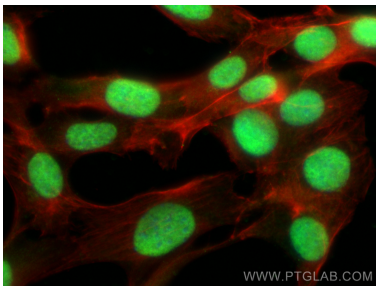
Immunohistochemical analysis of paraffin-embedded mouse ovary tissue slide using 14768-1-AP (FEN1 antibody) at dilution of 1:1000 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



IP result of anti-FEN1 (IP:14768-1-AP, 4ug; Detection:14768-1-AP 1:500) with NIH/3T3 cells lysate 1200ug.



Immunohistochemical analysis of paraffin-embedded human colon cancer tissue slide using 14768-1-AP (FEN1 antibody) at dilution of 1:200 (under 20x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Immunofluorescent analysis of (4% PFA) fixed NIH/3T3 cells using FEN1 antibody (14768-1-AP) at dilution of 1:400 and CoraLite®488-Conjugated Goat Anti-Rabbit IgG(H+L) (SA00013-2), CL594-phalloidin (red).