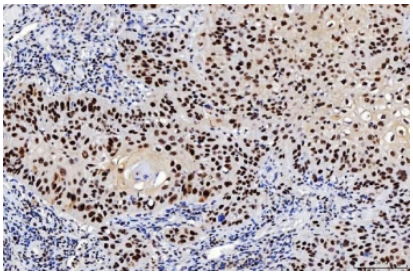
Flap endonuclease 1 Antibody / FEN1 [clone 6F3F2] (RQ6987)

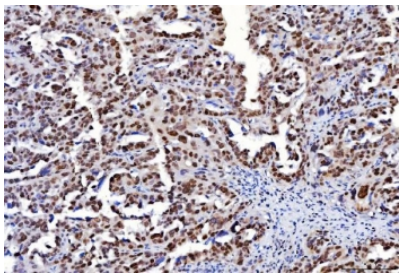
Catalog No.	Formulation	Size
RQ6987	0.5mg/ml if reconstituted with 0.2ml sterile DI water	100 ug

Bulk quote request

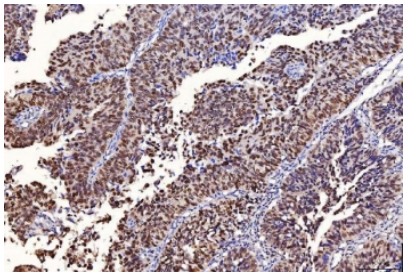
Availability	1-3 business days
Species Reactivity	Human, Mouse, Rat
Format	Antigen affinity purified
Host	Mouse
Clonality	Monoclonal (mouse origin)
Isotype	Mouse IgG1
Clone Name	6F3F2
Purity	Antigen affinity purified
Buffer	Lyophilized from 1X PBS with 2% Trehalose
UniProt	P39748
Localization	Nuclear
Applications	Western blot: 0.5-1 ug/ml Immunohistochemistry (FFPE): 2-5ug/ml Immunofluorescence: 5ug/ml Flow cytometry: 1-3ug/million cells
Limitations	This Flap endonuclease 1 antibody is available for research use only.



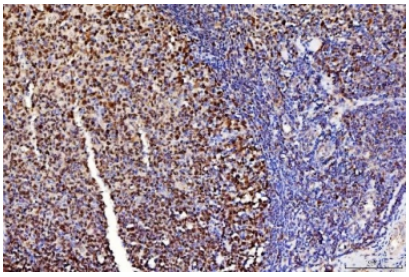
IHC staining of FFPE human laryngeal squamous cell carcinoma tissue with Flap endonuclease 1 antibody. HIER: boil tissue sections in pH8 EDTA for 20 min and allow to cool before testing.



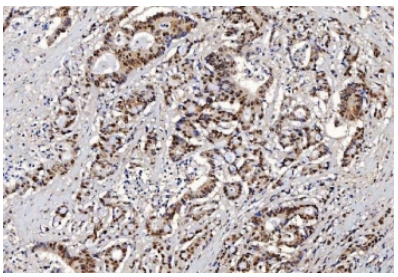
IHC staining of FFPE human ovarian cancer tissue with Flap endonuclease 1 antibody. HIER: boil tissue sections in pH8 EDTA for 20 min and allow to cool before testing.



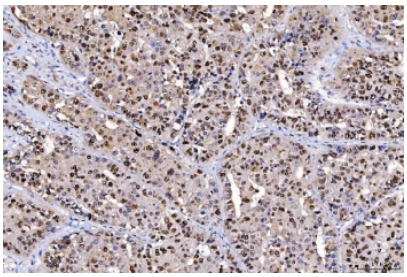
IHC staining of FFPE human bladder epithelial carcinoma tissue with Flap endonuclease 1 antibody. HIER: boil tissue sections in pH8 EDTA for 20 min and allow to cool before testing.



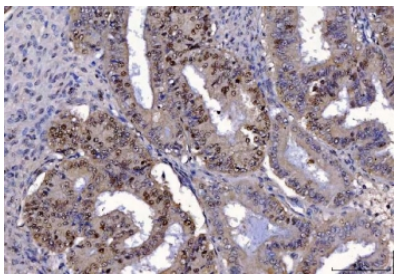
IHC staining of FFPE human tonsil tissue with Flap endonuclease 1 antibody. HIER: boil tissue sections in pH8 EDTA for 20 min and allow to cool before testing.



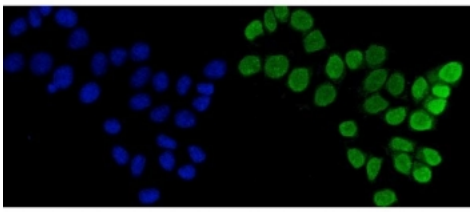
IHC staining of FFPE human colorectal adenocarcinoma tissue with Flap endonuclease 1 antibody. HIER: boil tissue sections in pH8 EDTA for 20 min and allow to cool before testing.



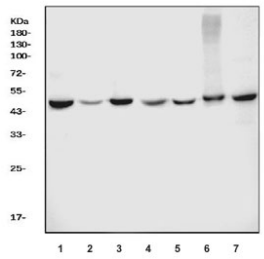
IHC staining of FFPE human liver cancer tissue with Flap endonuclease 1 antibody. HIER: boil tissue sections in pH8 EDTA for 20 min and allow to cool before testing.



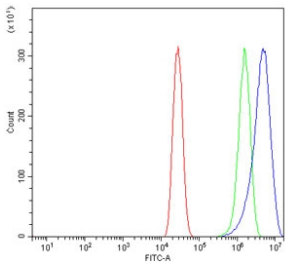
IHC staining of FFPE human endometrial cancer tissue with Flap endonuclease 1 antibody. HIER: boil tissue sections in pH8 EDTA for 20 min and allow to cool before testing.



Immunofluorescent staining of FFPE human MCF7 cells with Flap endonuclease 1 antibody (green) and DAPI nuclear stain (blue). HIER: steam section in pH6 citrate buffer for 20 min.



Western blot testing of 1) human HeLa, 2) human Jurkat, 3) human MOLT4, 4) rat thymus, 5) rat PC-12, 6) mouse thymus and 7) mouse RAW264.7 cell lysate with FEN-1 antibody. Expected molecular weight ~45 kDa.



Flow cytometry testing of human A431 cells with Flap endonuclease 1 antibody at 1ug/million cells (blocked with goat sera); Red=cells alone, Green=isotype control, Blue= Flap endonuclease 1 antibody.

Description

Flap endonuclease 1 is an enzyme that in humans is encoded by the FEN1 gene. It is mapped to 11q12.2. 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.

Application Notes

Optimal dilution of the Flap endonuclease 1 antibody should be determined by the researcher.

Immunogen

Recombinant human protein (amino acids Q4-E300) was used as the immunogen for the Flap endonuclease 1 antibody.

Storage

After reconstitution, the Flap endonuclease 1 antibody can be stored for up to one month at 4oC. For long-term, aliquot and store at -20oC. Avoid repeated freezing and thawing.

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