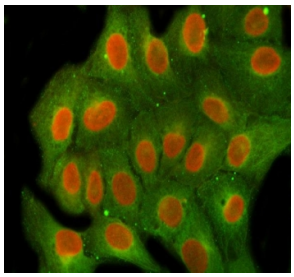
FEN-1 Antibody (RQ5695)

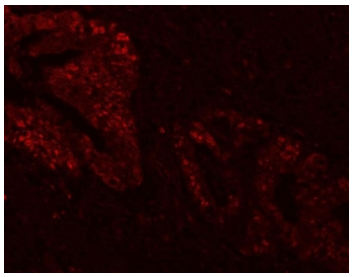
Catalog No.	Formulation	Size
RQ5695	0.5mg/ml if reconstituted with 0.2ml sterile DI water	100 ug

Bulk quote request

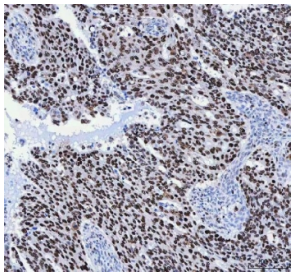
Availability	1-3 business days
Species Reactivity	Human, Mouse, Rat
Format	Antigen affinity purified
Clonality	Polyclonal
Isotype	Rabbit IgG
Purity	Affinity purified
Buffer	Lyophilized from 1X PBS with 2% Trehalose
UniProt	P39748
Localization	Nuclear
Applications	Western Blot : 0.5-1ug/ml Immunohistochemistry : 2-5ug/ml Immunofluorescence : 5ug/ml Flow Cytometry : 1-3ug/million cells Direct ELISA : 0.1-0.5ug/ml
Limitations	This FEN-1 antibody is available for research use only.



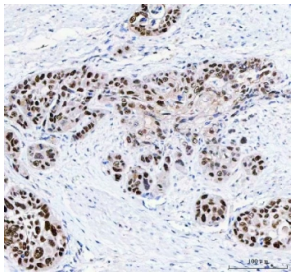
Immunofluorescent staining of FFPE human U-2 OS cells with FEN-1 antibody (red) and Beta Tubulin mAb (green). HIER: steam section in pH6 citrate buffer for 20 min.



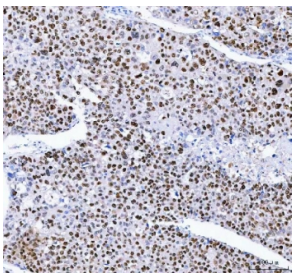
Immunofluorescent staining of FFPE human intestinal cancer tissue with FEN-1 antibody. HIER: steam section in pH8 EDTA buffer for 20 min.



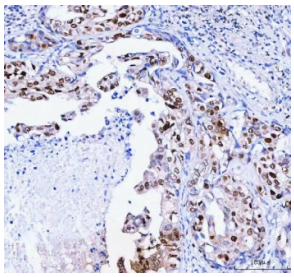
IHC staining of FFPE human ovarian serous adenocarcinoma with FEN-1 antibody. HIER: boil tissue sections in pH8 EDTA for 20 min and allow to cool before testing.



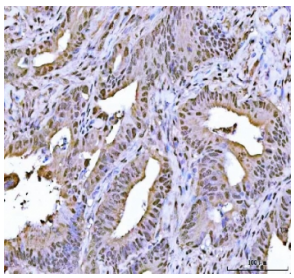
IHC staining of FFPE human esophageal squamous carcinoma with FEN-1 antibody. HIER: boil tissue sections in pH8 EDTA for 20 min and allow to cool before testing.



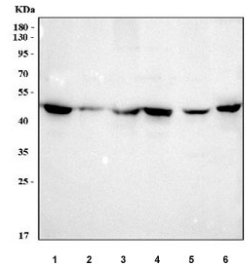
IHC staining of FFPE human liver cancer with FEN-1 antibody. HIER: boil tissue sections in pH8 EDTA for 20 min and allow to cool before testing.



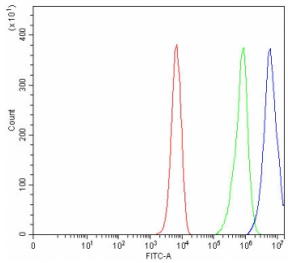
IHC staining of FFPE human lung adenocarcinoma with FEN-1 antibody. HIER: boil tissue sections in pH8 EDTA for 20 min and allow to cool before testing.



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



Western blot testing of 1) human HeLa, 2) human Daudi, 3) human U-2 OS, 4) human K562, 5) rat PC-12 and 6) mouse SP2/0 cell lysate with FEN-1 antibody. Expected molecular weight ~45 kDa.



Flow cytometry testing of fixed and permeabilized human K562 cells with FEN-1 antibody at 1ug/million cells (blocked with goat sera); Red=cells alone, Green=isotype control, Blue= FEN-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 FEN-1 antibody should be determined by the researcher.

Immunogen

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

Storage

After reconstitution, the FEN-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.

Ordering: Phone: 858.663.9055 | Fax: 1.267.821.0800 | Email: info@nsjbio.com