Product Name: **KD-Validated Flap Structure-Specific Endonuclease 1 Recombinant Rabbit Monoclonal Antibody**
Catalog #: **KVAb00739**
For research use only.

Summary

Description	KO&KD-Validated antibody
Host	Rabbit
Application	WB,FCM,ICC
Reactivity	Human,Mouse,Rat
Conjugation	Unconjugated
Modification	Unmodified
Isotype	Rabbit IgG
Clonality	Rabbit mAb
Form	Liquid
Storage	Aliquot and store at -20°C (valid for 12 months). Avoid freeze/thaw cycles.
Shipping	Ice bags
Buffer	Supplied in PBS (pH 7.4) containing 50% glycerol, and 0.02% sodium azide.
Purification	Affinity purification

Application

Dilution Ratio	WB 1:1,000-1:5,000; FC 1:200-1:2,000; ICC 1:100-1:1,000
Molecular Weight	Calculated MW: 42.6kDa

Antigen Information

Gene Name	FEN1
Alternative Names	FEN1; Flap Structure-Specific Endonuclease 1; FEN-1; MF1; DNase IV; RAD2; Maturation Factor-1; Flap Endonuclease 1; Maturation Factor 1; EC 3.1.-.-; HFEN-1
Gene ID	2237.0
SwissProt ID	P39748
Immunogen	A synthesized peptide derived from human FEN1

Background

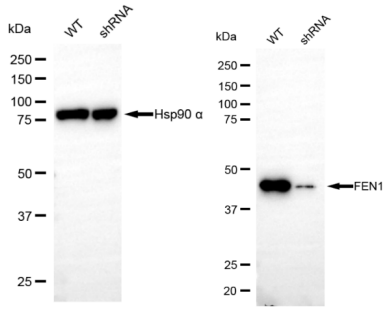
The protein encoded by this gene removes 5' overhanging flaps in DNA repair and processes the 5' ends of Okazaki fragments in lagging strand DNA synthesis. Direct physical interaction between this protein and AP endonuclease 1 during long-patch

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. [provided by RefSeq, Jul 2008]

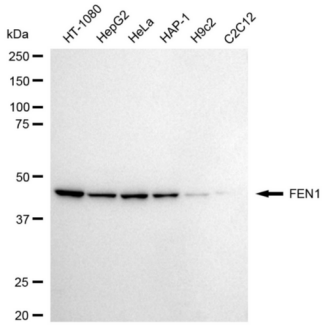
Research Area

Epigenetics and Nuclear Signaling

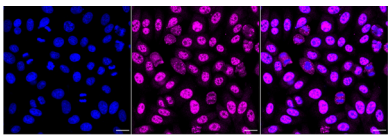
Image Data



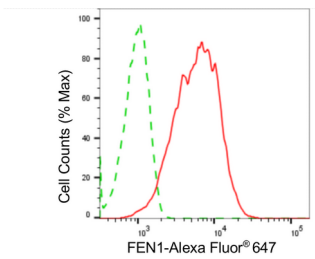
Western blotting analysis using FEN1 antibody (KVAb00739). FEN1 expression in wild-type (WT) and FEN1 shRNA knockdown (KD) HT-1080 cells with 20 µg of total cell lysates. Hsp90 α serves as a loading control. The blot was incubated with FEN1 antibody (KVAb00739, 1:5,000) and HRP-conjugated goat anti-rabbit secondary antibody (APS0635, 1:10,000) respectively.



Western blotting analysis using FEN1 antibody (KVAb00739). Total cell lysates (30 µg) from various cell lines were loaded and separated by SDS-PAGE. The blot was incubated with FEN1 antibody (KVAb00739, 1:5,000) and HRP-conjugated goat anti-rabbit secondary antibody (APS0635, 1:10,000) respectively.



Immunocytochemical staining of HepG2 cells with FEN1 antibody(KVAb00739, 1:1,000) . Nuclei were stained blue with DAPI; FEN1 was stained magenta with Alexa Fluor® 647. Images were taken using Leica stellaris 5. Protein abundance based on laser Intensity and smart gain: Medium. Scale bar, 20 µm.



Flow cytometric analysis of FEN1 expression in HepG2 cells using FEN1 antibody (KVAb00739, 1:2,000). Green, isotype control; red, FEN1.