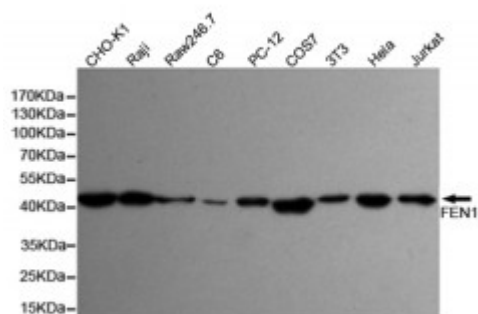


Anti-FEN-1 antibody



Description	Mouse monoclonal to FEN-1.
Model	STJ99235
Host	Mouse
Reactivity	Hamster, Human, Mouse, Rat, Simian
Applications	ELISA, WB
Immunogen	Purified recombinant human FEN-1 protein fragments expressed in E.coli.
Gene ID	2237
Gene Symbol	FEN1
Dilution range	WB 1:500-2000ELISA 1:10000-20000
Specificity	This antibody detects endogenous levels of FEN-1 and does not cross-react with related proteins.
Purification	The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen.
Clone ID	7H8-F4-C11
Note	For Research Use Only (RUO).
Protein Name	Flap endonuclease 1 FEN-1 DNase IV Flap structure-specific endonuclease 1 Maturation factor 1 MF1 hFEN-1
Molecular Weight	45kDa
Clonality	Monoclonal
Conjugation	Unconjugated

Isotype	IgG1
Formulation	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.
Concentration	1 mg/ml
Storage Instruction	Store at -20°C, and avoid repeat freeze-thaw cycles.
Database Links	HGNC:3650OMIM:600393
Alternative Names	Flap endonuclease 1 FEN-1 DNase IV Flap structure-specific endonuclease 1 Maturation factor 1 MF1 hFEN-1
Function	Structure-specific nuclease with 5'-flap endonuclease and 5'-3' exonuclease activities involved in DNA replication and repair. During DNA replication, cleaves the 5'-overhanging flap structure that is generated by displacement synthesis when DNA polymerase encounters the 5'-end of a downstream Okazaki fragment. It enters the flap from the 5'-end and then tracks to cleave the flap base, leaving a nick for ligation. Also involved in the long patch base excision repair (LP-BER) pathway, by cleaving within the apurinic/apyrimidinic (AP) site-terminated flap. Acts as a genome stabilization factor that prevents flaps from equilibrating into structures that lead to duplications and deletions. Also possesses 5'-3' exonuclease activity on nicked or gapped double-stranded DNA, and exhibits RNase H activity. Also involved in replication and repair of rDNA and in repairing mitochondrial DNA.
Cellular Localization	Isoform 1: Nucleus, nucleolus. Nucleus, nucleoplasm. Resides mostly in the nucleoli and relocalizes to the nucleoplasm upon DNA damage.. Isoform FENMIT: Mitochondrion
Post-translational Modifications	Acetylated by EP300. Acetylation inhibits both endonuclease and exonuclease activity. Acetylation also reduces DNA-binding activity but does not affect interaction with PCNA or EP300. Phosphorylation upon DNA damage induces relocalization to the nuclear plasma. Phosphorylation at Ser-187 by CDK2 occurs during late S-phase and results in dissociation from PCNA. Methylation at Arg-192 by PRMT5 impedes Ser-187 phosphorylation and increases interaction with PCNA.