

#2746 Store at -20°C

FEN-1 Antibody

✓ 100 µl
(10 western blots)

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This product is intended for research purposes only. This product is not intended to be used for therapeutic or diagnostic purposes in humans or animals.

Entrez-Gene ID # 2237
Swiss-Prot Acc. # P39748

Applications	Species Cross-Reactivity*	Molecular Wt.	Source
W Endogenous	H, M, R, Mk	45 kDa	Rabbit**

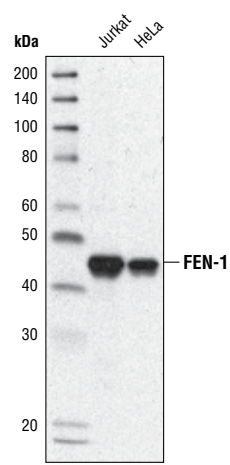
Background: Flap endonuclease-1 (FEN-1) is a structure-specific nuclease with multiple functions in DNA processing pathways (1,2). The replication and DNA repair activities of FEN-1 are critical for genomic stability in the eukaryotic cell. Through interaction with proliferation cell nuclear antigen (PCNA), FEN-1 helps coordinate Okazaki fragment maturation by removing RNA-DNA primers (3). FEN-1 is also required for non-homologous end joining of double stranded DNA breaks in long patch base excision repair (4,5). The multi-functional activities of FEN-1 are regulated by various mechanisms, including protein partner interactions (6,7), post-translational modifications (8,9), and subcellular re-localization in response to cell cycle or DNA damage (10).

Specificity/Sensitivity: FEN-1 Antibody detects endogenous levels of total FEN-1 protein.

Source/Purification: Polyclonal antibodies are produced by immunizing animals with a synthetic peptide corresponding to amino acids surrounding Lys313 of human FEN-1. Antibodies are purified by peptide affinity chromatography.

Background References:

- (1) Shen, B. et al. (2005) *Bioessays* 27, 717–729.
- (2) Liu, Y. et al. (2004) *Annu. Rev. Biochem.* 73, 589–615.
- (3) Sakurai, S. et al. (2005) *EMBO J.* 24, 683–693.
- (4) Wu, X. et al. (1999) *Proc. Natl. Acad. Sci. USA* 96, 1303–1308.
- (5) Gary, R. et al. (1999) *J. Biol. Chem.* 274, 4354–4363.
- (6) Brosh, R.M. et al. (2001) *EMBO J.* 20, 5791–5801.
- (7) Sharma, S. et al. (2004) *J. Biol. Chem.* 279, 9847–9856.
- (8) Henneke, G. et al. (2003) *Oncogene* 22, 4301–4313.
- (9) Hasan, S. et al. (2001) *Mol. Cell* 7, 1221–1231.
- (10) Qiu, J. et al. (2001) *J. Biol. Chem.* 276, 4901–4908.



Western blot analysis of extracts from Jurkat and HeLa cells using FEN-1 Antibody.

Storage: Supplied in 10 mM sodium HEPES (pH 7.5), 150 mM NaCl, 100 µg/ml BSA and 50% glycerol. Store at -20°C. Do not aliquot the antibody.

*Species cross-reactivity is determined by western blot.

**Anti-rabbit secondary antibodies must be used to detect this antibody.

Recommended Antibody Dilutions:

Western blotting 1:1000

For application specific protocols please see the web page for this product at www.cellsignal.com.

Please visit www.cellsignal.com for a complete listing of recommended companion products.

IMPORTANT: For western blots, incubate membrane with diluted antibody in 5% w/v BSA, 1X TBS, 0.1% Tween-20 at 4°C with gentle shaking, overnight.

Applications Key: W—Western IP—Immunoprecipitation IHC—Immunohistochemistry ChIP—Chromatin Immunoprecipitation IF—Immunofluorescence F—Flow cytometry E-P—ELISA-Peptide
Species Cross-Reactivity Key: H—human M—mouse R—rat Hm—hamster Mk—monkey Mi—mink C—chicken Dm—D. melanogaster X—Xenopus Z—zebrafish B—bovine
 Dg—dog Pg—pig Sc—S. cerevisiae Ce—C. elegans Hr—Horse All—all species expected Species enclosed in parentheses are predicted to react based on 100% homology.