

Product Datasheet

FEN-1 Antibody - BSA Free

NB100-320

Unit Size: 100 ul

Store at 4C. Do not freeze.

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Publications: 9

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NB100-320

FEN-1 Antibody - BSA Free

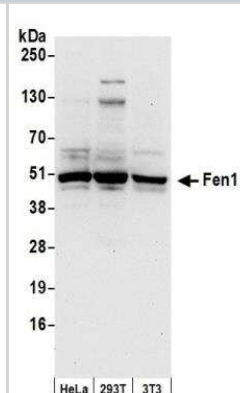
Product Information	
Unit Size	100 ul
Concentration	1.0 mg/ml
Storage	Store at 4C. Do not freeze.
Clonality	Polyclonal
Preservative	0.09% Sodium Azide
Isotype	IgG
Purity	Immunogen affinity purified
Buffer	Tris-Citrate/Phosphate (pH 7.0 - 8.0)
Target Molecular Weight	43 kDa

Product Description	
Description	Novus Biologicals Rabbit FEN-1 Antibody - BSA Free (NB100-320) is a polyclonal antibody validated for use in WB and IP. Anti-FEN-1 Antibody: Cited in 9 publications. All Novus Biologicals antibodies are covered by our 100% guarantee.
Host	Rabbit
Gene ID	2237
Gene Symbol	FEN1
Species	Human, Mouse
Immunogen	The immunogen recognized by this antibody maps to a region between residues 75 and 125 of human Flap Structure Endonuclease 1 using the numbering given in entry NP_004102.1 (GeneID 2237).

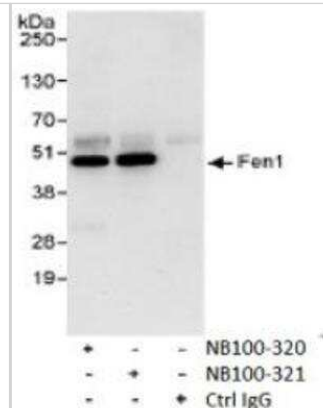
Product Application Details	
Applications	Western Blot, Immunoprecipitation
Recommended Dilutions	Western Blot 1:2000 - 1:10000, Immunoprecipitation 2 - 10 ug/mg lysate

Images

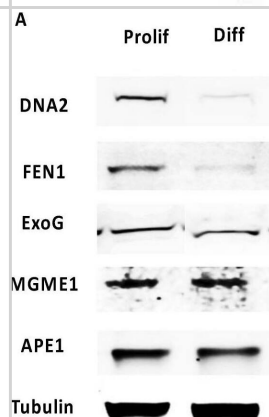
Western Blot: FEN-1 Antibody [NB100-320] - Detection of Human and Mouse Fen1 by Western Blot. Samples: Whole cell lysate (50 ug) from HeLa, 293T, and mouse NIH3T3 cells prepared using NETN lysis buffer. Antibody: Affinity purified rabbit anti-Fen1 antibody NB100-320 used for WB at 0.1 ug/ml. Detection: Chemiluminescence with an exposure time of 30 seconds.



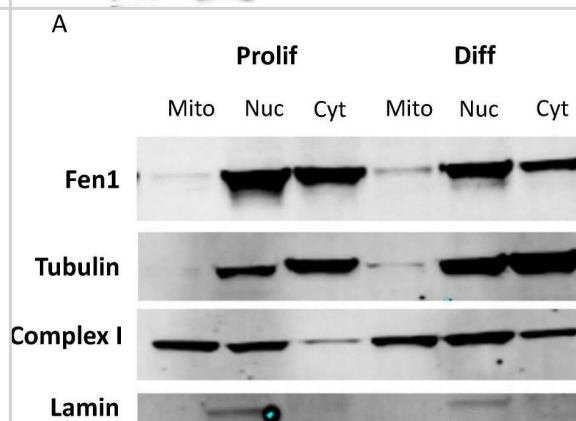
Immunoprecipitation: FEN-1 Antibody [NB100-320] - Whole cell lysate from HeLa cells (1 mg loaded), affinity purified rabbit antiFen1 antibody used for IP at 3 ug/mg lysate. Fen1 was also immunoprecipitated by rabbit anti-Fen1 antibody NB100-321, which recognizes a downstream epitope.



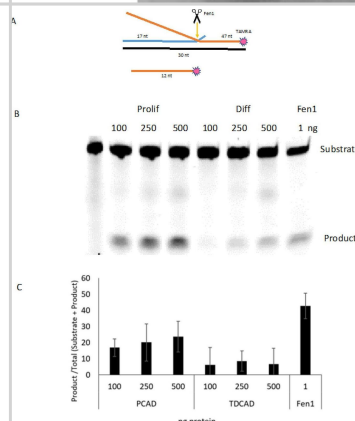
Expression of nucleases upon differentiation. (A) Representative Western blots from whole-cell extracts from proliferating (Prolif) and terminally differentiated (Diff) CAD cells. (B) Quantification. The signals were normalized to that for tubulin as a loading control, with the Prolif levels set to 100%. * denotes $p < 0.05$ for Diff compared with Prolif., determined using Student's t-test ($n = 3$). Image collected and cropped by CiteAb from the following open publication (<https://pubmed.ncbi.nlm.nih.gov/37628896>), licensed under a CC-BY license. Not internally tested by Novus Biologicals.



Expression of Fen1 in the mitochondria of differentiated cells. (A) Representative Western blots for mitochondrial cell extracts of Prolif and Diff cells. (B) Fen1 protein signal was normalized to that for Complex 1 as a loading control for mitochondria, with laminin as a marker for the nucleus. Mitochondrial Fen1 levels were divided by whole-cell Fen1 levels to calculate mitochondrial Fen1 per cell. Error bars indicate the standard deviation ($n = 3$). Image collected and cropped by CiteAb from the following open publication (<https://pubmed.ncbi.nlm.nih.gov/37628896>), licensed under a CC-BY license. Not internally tested by Novus Biologicals.



Flap excision activity in proliferating and differentiated CAD cells. (A) Substrate for the flap endonuclease assay. The double-flap structure is optimal for Fen1 [27]; the target strand for that enzyme is labeled on its 5' end the TAMRA fluor. The expected Fen1 product is shown. (B) Representative gel for the flap excision assay using whole-cell extracts from Prolif and Diff cells. Increasing amounts of extract were used for 1 pmol of substrate; Fen1 (51 nmol) was used as a positive control. The incubation was performed at 37 C for 30 min. (C) Quantification using Image J (version 2.0.0-rc-68/1.52i) ($n = 3$). Image collected and cropped by CiteAb from the following open publication (<https://pubmed.ncbi.nlm.nih.gov/37628896>), licensed under a CC-BY license. Not internally tested by Novus Biologicals.



Publications

Caston RA, Fortini P, Chen K et al. Maintenance of Flap Endonucleases for Long-Patch Base Excision DNA Repair in Mouse Muscle and Neuronal Cells Differentiated In Vitro International Journal of Molecular Sciences 2023-08-12 [PMID: 37628896]

YY1 suppresses FEN1 over-expression and drug resistance in breast cancer Wang J, Zhou L, Li Z et al. Cancer 2005 -07-07 [PMID: 25885449] (WB, Human)

Duxin JP, Moore HR, Sidorova J et al. Okazaki fragment processing-independent role for human Dna2 enzyme during DNA replication. J Biol Chem 2012-06-01 [PMID: 22570476]

Saharia A, Teasley DC, Duxin JP et al. FEN1 ensures telomere stability by facilitating replication fork re-initiation. J Biol Chem 2010-08-01 [PMID: 20551483]

Sampathi S, Bhusari A, Shen B et al. Human flap endonuclease I is in complex with telomerase and is required for telomerase-mediated telomere maintenance. J Biol Chem 2009-02-01 [PMID: 19068479]

Hegde ML, Theriot CA, Das A et al. Physical and functional interaction between human oxidized base-specific DNA glycosylase NEIL1 and flap endonuclease 1. J Biol Chem 2008-10-01 [PMID: 18662981]

Szczesny B, Tann AW, Longley MJ et al. Long patch base excision repair in mammalian mitochondrial genomes. J Biol Chem 2008-09-01 [PMID: 18635552]

Wang SC, Nakajima Y, Yu YL et al. Tyrosine phosphorylation controls PCNA function through protein stability. Nat Cell Biol 2006-12-01 [PMID: 17115032]

Muftuoglu M, Wong HK, Imam SZ et al. Telomere repeat binding factor 2 interacts with base excision repair proteins and stimulates DNA synthesis by DNA polymerase beta. Cancer Res 2006-01-01 [PMID: 16397223]





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Products Related to NB100-320

NB800-PC1	HeLa Whole Cell Lysate
NBP2-33376H	Blue Marker Antibody (6F4-F6) [HRP]
HAF008	Goat anti-Rabbit IgG Secondary Antibody [HRP]
NB7160	Goat anti-Rabbit IgG (H+L) Secondary Antibody [HRP]
NBP2-24891	Rabbit IgG Isotype Control

Limitations

This product is for research use only and is not approved for use in humans or in clinical diagnosis. Primary Antibodies are guaranteed for 1 year from date of receipt.

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