

Product Datasheet

Histone H4 [ac Lys12, ac Lys16, ac Lys8, ac Lys5] Antibody NBP2-16848

Unit Size: 0.1 ml

Aliquot and store at -20C or -80C. Avoid freeze-thaw cycles.

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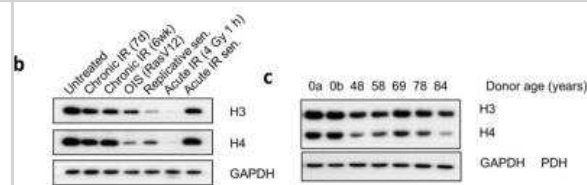
NBP2-16848

Histone H4 [ac Lys12, ac Lys16, ac Lys8, ac Lys5] Antibody

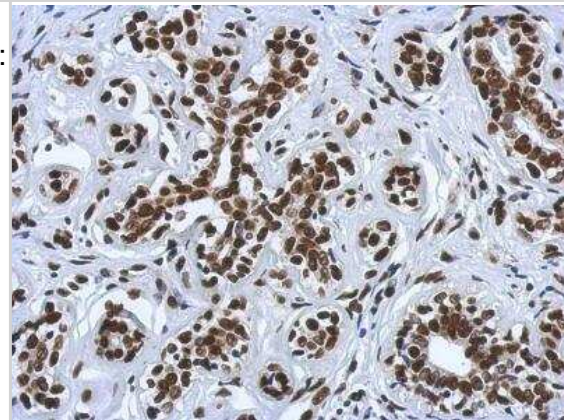
Product Information	
Unit Size	0.1 ml
Concentration	Concentrations vary lot to lot. See vial label for concentration. If unlisted please contact technical services.
Storage	Aliquot and store at -20C or -80C. Avoid freeze-thaw cycles.
Clonality	Polyclonal
Preservative	0.01% Thimerosal
Isotype	IgG
Purity	Antigen Affinity-purified
Buffer	PBS, 1% BSA, 20% Glycerol
Target Molecular Weight	11 kDa
Product Description	
Description	Novus Biologicals Rabbit Histone H4 [ac Lys12, ac Lys16, ac Lys8, ac Lys5] Antibody (NBP2-16848) is a polyclonal antibody validated for use in IHC, WB, ICC/IF and Simple Western. Anti-Histone H4 Antibody: Cited in 2 publications. All Novus Biologicals antibodies are covered by our 100% guarantee.
Host	Rabbit
Gene ID	121504
Gene Symbol	H4C16
Species	Human, Mouse, Rat
Reactivity Notes	Immunogen displays the following percentage of sequence identity for non-tested species: <i>Xenopus laevis</i> (100%).
Immunogen	Carrier-protein conjugated synthetic peptide surrounding acetyl Lys5/Lys8/Lys12/Lys16 of human Histone H4. The exact sequence is proprietary.
Product Application Details	
Applications	Western Blot, Simple Western, Immunohistochemistry-Paraffin, Dot Blot, Immunocytochemistry/ Immunofluorescence, Immunohistochemistry
Recommended Dilutions	Western Blot 1:5000-1:20000, Simple Western, Immunohistochemistry, Immunocytochemistry/ Immunofluorescence 1:100-1:1000, Immunohistochemistry-Paraffin 1:100-1:1000, Dot Blot Assay dependent
Application Notes	See Simple Western Antibody Database for Simple Western validation: Tested in Brain, separated by Size, apparent MW was 11 kDa

Images

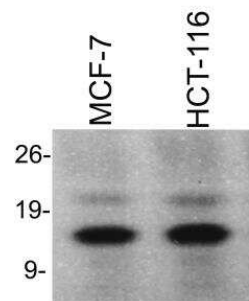
Western Blot: Histone H4 [ac Lys12, ac Lys16, ac Lys8, ac Lys5] Antibody [NBP2-16848] - Reduced histone levels in senescent cells is induced in vitro by different means, and in vivo from aged donors. (b) Western immunoblot analyses of histones in fibroblasts described in (a). (c) Histone levels in dermal fibroblasts isolated from human neonatal (age 0, donors a and b) and adult donors. Anti-Histone H3 Antibody (NB500-171) used at 1:20,000 and Anti-Histone H4 used at 1:10,000. Image collected and cropped by CiteAb from the following publication (<https://doi.org/10.1038/s41598-020-59163-4>) licensed under a CC-BY license.



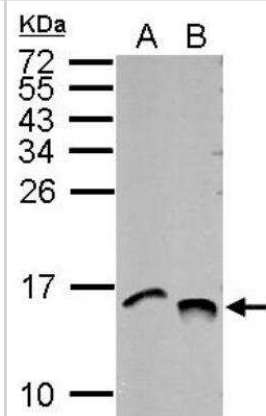
Immunohistochemistry-Paraffin: Histone H4 Antibody [NBP2-16848] - Human breast cancer, using antibody at 1:500 dilution. Antigen Retrieval: Trilogy™ (EDTA based) buffer, 15min



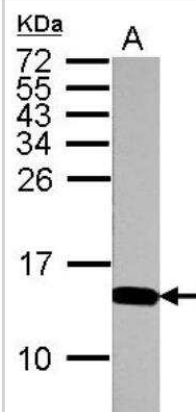
Western Blot: Histone H4 Antibody [NBP2-16848] - WB for total histone in MCF-7 and HCT116 cells. Image from verified customer review.



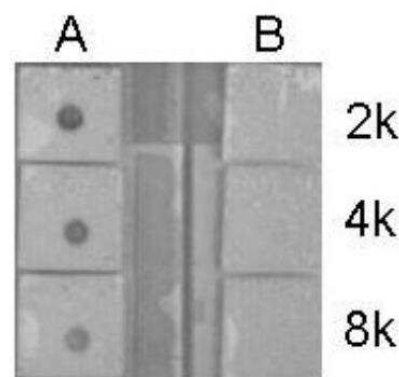
Western Blot: Histone H4 Antibody [NBP2-16848] - Sample (30 ug of whole cell lysate) A: NIH-3T3 B: BCL-1 15% SDS PAGE diluted at 1:10000



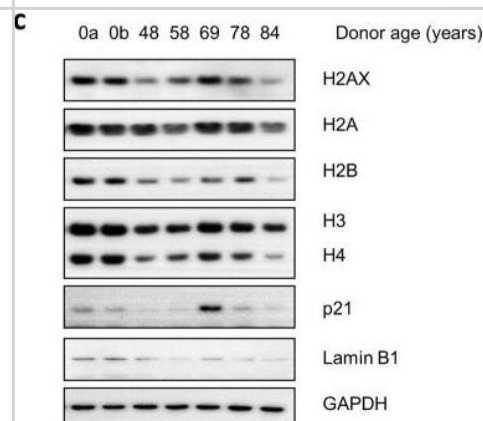
Western Blot: Histone H4 Antibody [NBP2-16848] - Sample (30 ug of whole cell lysate) A: HeLa 15% SDS PAGE diluted at 1:10000



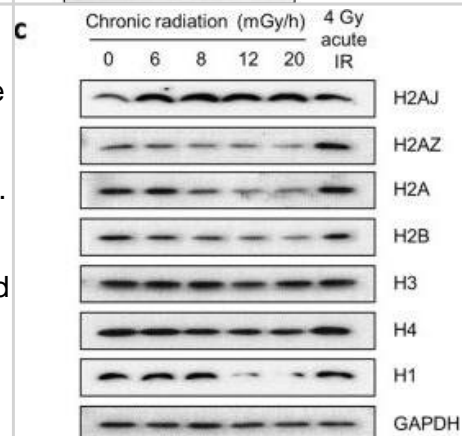
Dot Blot: Histone H4 Antibody [NBP2-16848] - Peptide samples (0.1 ug) were spotted onto positively charged nylon membrane and blotted with Histone H4 (acetyl Lys6, Lys9, Lys13, Lys17) antibody Histone H4 at different dilution as indicated. A: Peptide samples of Histone H4 (acetyl Lys6, Lys9, Lys13, Lys17). B: Peptide samples of Histone H4



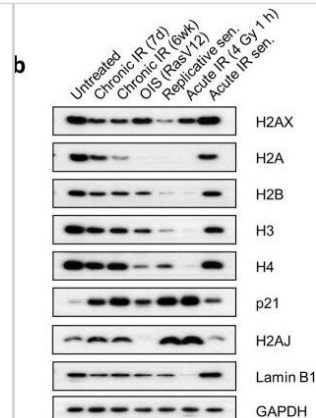
Reduced histone levels in senescent cells is induced in vitro by different means, & in vivo from aged donors. (a) Phase-contrast images of primary fibroblasts induced into senescence by chronic γ -radiation, oncogene over-expression or exhaustive replication (replicative senescence), & DNA damage from a single acute 4 Gy X-ray dose at an early time-point (1 hour) as a control for DNA damage without senescence. Scale bars 200 μ m. (b) Western immunoblot analyses of histones in fibroblasts described in (a). (c) Histone levels in dermal fibroblasts isolated from human neonatal (age 0, donors a & b) & adult donors. Image collected & cropped by CiteAb from the following publication (<https://pubmed.ncbi.nlm.nih.gov/32042076>), licensed under a CC-BY license. Not internally tested by Novus Biologicals.



Chronic γ -radiation reduces histone levels. (a) Western blot analyses of histone H2AX & γ H2AX in primary fibroblasts exposed to various dose-rates of chronic γ -radiation for 7 days. Cells irradiated with a single acute dose of 4 Gy X-ray were included as control. (b) Effect of chronic γ -irradiation on H2AX levels in three different isogenic primary cell types from a different donor to that used in (a) at the same dose rates as in (a). (c) Immunoblots of other histones in chronically irradiated primary fibroblasts. (d) All significant histone level changes detected by SILAC LC-MS/MS protein analyses of samples from primary fibroblasts exposed or mock-exposed to chronic γ -radiation for 7 days. Image collected & cropped by CiteAb from the following publication (<https://pubmed.ncbi.nlm.nih.gov/32042076>), licensed under a CC-BY license. Not internally tested by Novus Biologicals.



Reduced histone levels in senescent cells is induced in vitro by different means, & in vivo from aged donors. (a) Phase-contrast images of primary fibroblasts induced into senescence by chronic γ -radiation, oncogene over-expression or exhaustive replication (replicative senescence), & DNA damage from a single acute 4 Gy X-ray dose at an early time-point (1 hour) as a control for DNA damage without senescence. Scale bars 200 μ m. (b) Western immunoblot analyses of histones in fibroblasts described in (a). (c) Histone levels in dermal fibroblasts isolated from human neonatal (age 0, donors a & b) & adult donors. Image collected & cropped by CiteAb from the following publication (<https://pubmed.ncbi.nlm.nih.gov/32042076>), licensed under a CC-BY license. Not internally tested by Novus Biologicals.

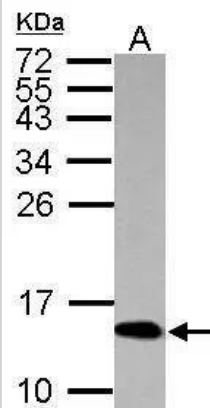


Western Blot: Histone H4 [ac Lys12, ac Lys16, ac Lys8, ac Lys5]
Antibody [NBP2-16848] - Sample (30 μ g of whole cell lysate)

A: HeLa

15% SDS PAGE

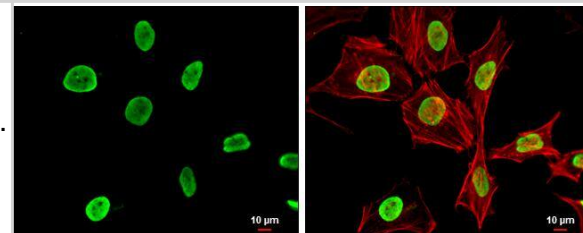
NBP2-16848 diluted at 1:10000



Histone H4K5K8K12K16ac (acetyl Lys5/Lys8/Lys12/Lys16) antibody detects Histone H4K5K8K12K16ac (acetyl Lys5/Lys8/Lys12/Lys16) protein at nucleus by immunofluorescent analysis.

Sample: HeLa cells were fixed in 4% paraformaldehyde at RT for 15 min.

Green: Histone H4K5K8K12K16ac (acetyl Lys5/Lys8/Lys12/Lys16) protein stained by Histone H4K5K8K12K16ac (acetyl Lys5/Lys8/Lys12/Lys16) antibody (NBP2-16848) diluted at 1:500.
Red: phalloidin, a cytoskeleton marker, diluted at 1:200.
Scale bar = 10 μ m.



Publications

Anderzhanova, E, Hafner, K Et al. The stress susceptibility factor FKBP51 controls S-ketamine-evoked release of mBDNF in the prefrontal cortex of mice. *Neurobiol Stress* 2020-11-01 [PMID: 33344695] (WB, Mouse)

Lowe DJ, Herzog M, Mosler T et al. Chronic irradiation of human cells reduces histone levels and deregulates gene expression *Sci Rep* 2020-02-10 [PMID: 32042076] (WB, Human)



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Products Related to NBP2-16848

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

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