

# Product Datasheet

## Histone H2B, member S Antibody - BSA Free NB100-56347

Unit Size: 0.1 mg

Store at 4C short term. Aliquot and store at -20C long term. Avoid freeze-thaw cycles.

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### Publications: 14

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**NB100-56347**

Histone H2B, member S Antibody - BSA Free

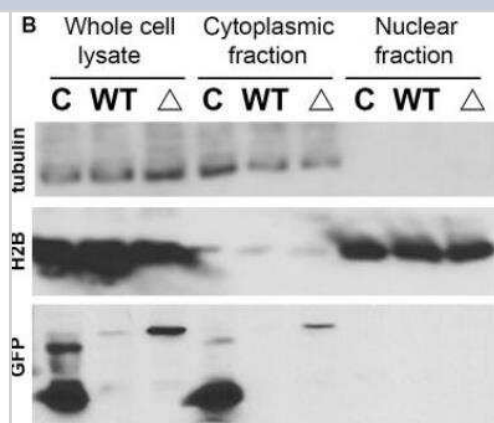
Product Information	
Unit Size	0.1 mg
Concentration	1.0 mg/ml
Storage	Store at 4C short term. Aliquot and store at -20C long term. Avoid freeze-thaw cycles.
Clonality	Polyclonal
Preservative	0.05% Sodium Azide
Isotype	IgG
Purity	Protein G purified
Buffer	PBS

Product Description	
Host	Rabbit
Gene ID	54145
Gene Symbol	H2BFS
Species	Human, Mouse, Rat, Canine, Chicken, Drosophila, Mammal, Zebrafish
Immunogen	This antibody was generated by immunizing rabbits with a synthetic peptide corresponding to amino acid residues 111-125 AVSEGTKAVTKYTSS of human Histone H2B; GenBank no. CAI19747.1.

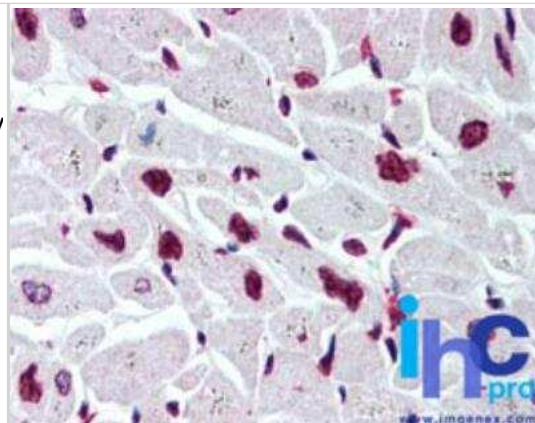
Product Application Details	
Applications	Western Blot, Immunoblotting, Immunohistochemistry, Immunohistochemistry-Paraffin
Recommended Dilutions	Western Blot 2 ug/ml, Immunohistochemistry, Immunohistochemistry-Paraffin 10 ug/ml, Immunoblotting reported in scientific literature (PMID 28235947)
Application Notes	A 15 kDa band is observed. This antibody is routinely quality controlled in human lysates.

**Images**

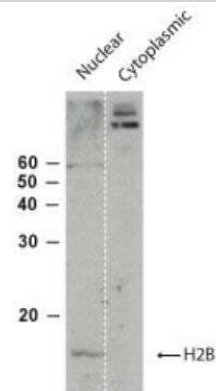
Western Blot: Histone H2B, member S Antibody [NB100-56347] - Doxycycline-inducible stable cell lines expressing TDP43 variants. Immunoblotting of whole-cell lysates and cytoplasmic and nuclear fractions for alpha-tubulin (cytoplasmic marker; top panel), H2B (nuclear marker; middle panel), and eGFP (a marker for expression of the eGFP-His-tagged doxycycline-inducible plasmids) following subcellular fractionation of the control. Image collected and cropped by CiteAb from the following publication (<https://www.frontiersin.org/article/10.3389/fncel.2020.00117/full>), licensed under a CC-BY license.



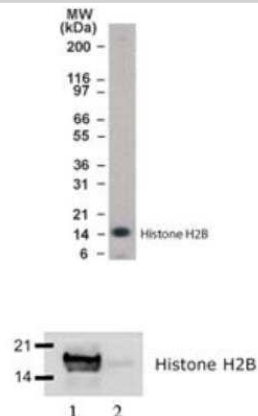
Immunohistochemistry-Paraffin: Histone H2B, member S Antibody [NB100-56347] - Human heart stained with Histone H2B antibody at 10 ug/ml. Staining of formalin-fixed tissues is enhanced by boiling tissue sections in 10 mM sodium citrate buffer, pH 6.0 for 10-20 min followed by cooling at RT for 20 min.



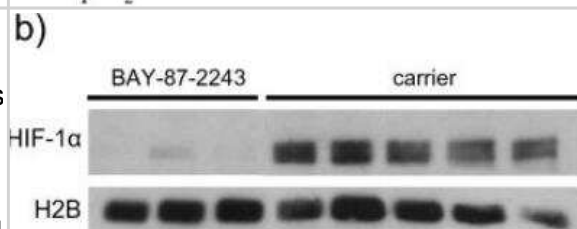
Western Blot: Histone H2B, member S Antibody [NB100-56347] - Analysis of Histone H2B using NB100-56347 at 1:250 in nuclear and cytoplasmic fractions made from Drosophila head extracts using Novus' Nuclear Extraction Kit. Data courtesy of Dr. Jerry Yin, University of Wisconsin-Madison.



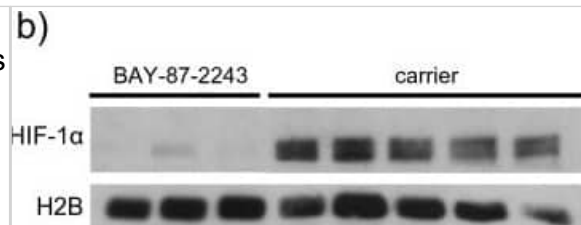
Western Blot: Histone H2B, member S Antibody [NB100-56347] - Top: Analysis of Histone H2B in human PBMC lysate with this antibody. Bottom: Western blot analysis of fractionated Cos-7 cells using this antibody anti-Histone H2B. Cos-7 cells were fractionated into nuclear cytosolic/membrane fractions. Approximately 15 ug of each fraction was separated on SDS PAGE. Lane 1) Nuclear fraction Lane 2) Cytosolic/membrane fraction.



Western Blot: Histone H2B, member S Antibody [NB100-56347] - BAY-87-2243 inhibits nuclear HIF-1alpha protein expression. UT-SCC-5 tumors were treated either with BAY-87-2243 or carrier for 3, 5, or 7 days and were excised 24 h after end of treatment. Western blots of nuclear HIF-1alpha from different animals 3 days after BAY-87-2243 application. Quantification of western blots by densitometry relative to histone-H2B, means +/- SD. Image collected and cropped by CiteAb from the following publication (<https://ro-journal.biomedcentral.com/articles/10.1186/1748-717X-9-207>), licensed under a CC-BY license.



BAY-87-2243 inhibits nuclear HIF-1 $\alpha$  protein expression. UT-SCC-5 tumors were treated either with BAY-87-2243 or carrier for 3, 5, or 7 days and were excised 24 h after end of treatment: a) immunohistochemistry, black arrows indicate the positive nuclear HIF-1 $\alpha$  staining, scale bar: 20  $\mu$ m; b) western blots of nuclear HIF-1 $\alpha$  from different animals 3 days after BAY-87-2243 application; c) quantification of western blots by densitometry relative to histone-H2B, means  $\pm$  SD.



## Publications

Rieckhoff J, Meyer F, Classen S et al. Exploiting Chromosomal Instability of PTEN-Deficient Triple-Negative Breast Cancer Cell Lines for the Sensitization against PARP1 Inhibition in a Replication-Dependent Manner Cancers (Basel) 2020-09-29 [PMID: 33003585] (WB, Human)

Paez-Colasante X, Figueroa-Romero C, Rumora AE et al. Cytoplasmic TDP43 Binds microRNAs: New Disease Targets in Amyotrophic Lateral Sclerosis Front Cell Neurosci 2020-05-12 [PMID: 32477070] (WB, Human)

Malik AM, Miguez RA, Li X et al. Matrin 3-dependent neurotoxicity is modified by nucleic acid binding and nucleocytoplasmic localization Elife. 2018-07-16 [PMID: 30015619] (WB, Rat)

Archbold HC, Jackson KL, Arora A et al. TDP43 nuclear export and neurodegeneration in models of amyotrophic lateral sclerosis and frontotemporal dementia. Sci Rep. 2018-03-15 [PMID: 29545601] (Rat)

Nechemia-Arbely Y, Fachinetti D, Miga KH et al. Human centromeric CENP-A chromatin is a homotypic, octameric nucleosome at all cell cycle points. J. Cell Biol. 2017-02-24 [PMID: 28235947]

Myllynen L, Kwiatkowski M, Gleibner L et al. Quantitative proteomics unveiled: Regulation of DNA double strand break repair by EGFR involves PARP1. Radiother Oncol 2015-09-25 [PMID: 26422459] (WB, Human)

Chen SC, Huang SY, Lin WT et al. Aortic smooth muscle cell alterations in mice systemically exposed to arsenic. Heart Vessels 2015-07-02 [PMID: 26135927] (WB, Mouse)

Qin Weiping, Pan Jiangping, Wu Yong et al. Protection against dexamethasone-induced muscle atrophy is related to modulation by testosterone of FOXO1 and PGC-1alpha. Biochem Biophys Res Commun. 2010-12-17 [PMID: 21094144] (Rat)

Helbig L, Koi L, Bruchner K et al. BAY 87-2243, a novel inhibitor of hypoxia-induced gene activation, improves local tumor control after fractionated irradiation in a schedule-dependent manner in head and neck human xenografts. Radiat Oncol. 2014-09-24 [PMID: 25234922] (WB, Human)

### Details:

Histone H2B antibody used as loading control for WB at 1:500 dilution on nuclear fractions from UT-SCC-5 xenografts -human squamous cell carcinoma /hSCC of the tongue UT-SCC-5 with hypoxia-induced activation of HIF-1 alpha (Figure 1b).

Myllynen L. Regulation of DNA Repair by EGF Receptor Signaling After X-Irradiation. Thesis. 2014-01-23 (WB, Human)

### Details:

UTSCC5 & SAS head/neck squamous cell carcinoma cells, Fig 21C, D. The expression of H2B was analyzed in the chromatin-bound fractions of the cells.

Banerjee M, Datta M, Majumder P et al. Transcription regulation of caspase-1 by R393 of HIPPI and its molecular partner HIP-1. Nucleic Acids Res. 2010-01-01 [PMID: 19934260] (WB)

Golks A, Tran TT, Goetschy JF, Guerini D. Requirement for O-linked N-acetylglucosaminyltransferase in lymphocytes activation. EMBO J. 2007-10-17 [PMID: 17882263]

More publications at <http://www.novusbio.com/NB100-56347>



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### **Products Related to NB100-56347**

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HAF008	Goat anti-Rabbit IgG Secondary Antibody [HRP]
NB7160	Goat anti-Rabbit IgG (H+L) Secondary Antibody [HRP]
NBP2-24891	Rabbit IgG Isotype Control
NB100-56347PEP	Histone H2B, member S Antibody Blocking Peptide

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### **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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