

Histone 3.1 Recombinant Rabbit Monoclonal Antibody Product Datasheet

Catalog# BX00088

Clone# RR692

Predicted Molecular Wt: 15kDa
Species Cross-reactivity: Hu, Mu, Rat, Bovine, Dog, Green Monkey, Zebrafish

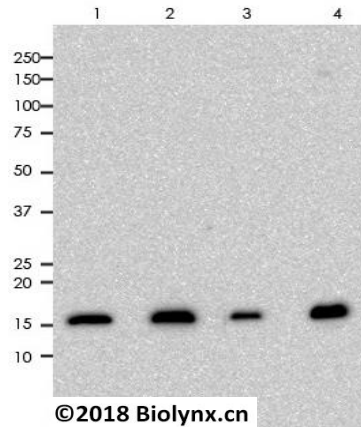
Purity: ProA affinity purified IgG
Form: Liquid
Swissprot ID: P68431

Species cross-reactivity determined by WB

Applications: WB IHC-P FC IP

Background:

Core component of nucleosome. Nucleosomes wrap and compact DNA into chromatin, limiting DNA accessibility to the cellular machineries which require DNA as a template. Histones thereby play a central role in transcription regulation, DNA repair, DNA replication and chromosomal stability. DNA accessibility is regulated via a complex set of post-translational modifications of histones, also called histone code, and nucleosome remodeling.



All lanes: Anti-Histone 3.1 antibody at 1:10,000 dilution

Predicted MW: 15 kDa
 Observed MW: 15 kDa

Lane 1: HeLa
 Lane 2: HT-29
 Lane 3: MCF-7
 Lane 4: Molt-4

Lysates at 10 µg per lane
 2nd Ab:
 GAR HRP(H+L) 1:5,000

Exposure: 60s

Immunogen:

A synthetic peptide corresponding to residues aa1-100 of human Histone 3.1 was used as an immunogen.

Storage Buffer:

PBS 59%, Sodium azide 0.01%, Glycerol 40%, BSA 0.05%.

Storage conditions:

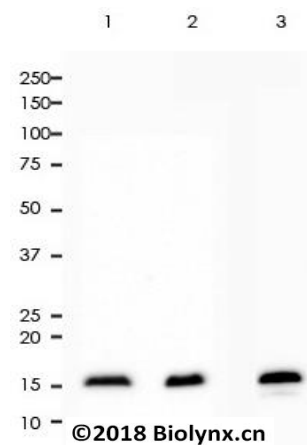
-20°C.

Storage instructions:

Shipped on blue ice. Upon delivery, aliquot, and store at -20°C. Avoid freeze / thaw cycles.

Recommended Dilutions:

WB: 1:2,000 - 1:5,000
 IHC-P: 1:800 - 1:1,600
 FC: 1:50 - 1:200
 IP: 1:100



All lanes: Anti-Histone 3.1 antibody at 1:5,000 dilution

Predicted MW: 15 kDa
 Observed MW: 15 kDa

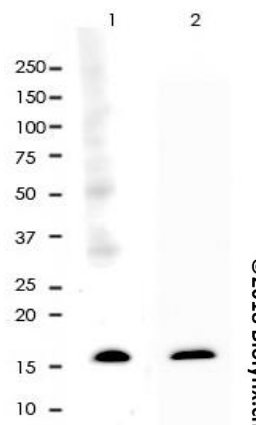
Lane 1: A431
 Lane 2: 293
 Lane 3: HepG2

Lysates at 10 µg per lane
 2nd Ab:
 GAR HRP(H+L) 1:5,000

Exposure: 120s

Background References:

1. Wu JL et al. PLoS One 10:e0126623 (2015).
2. Westman J et al. PLoS Pathog 11:e1005319 (2015).



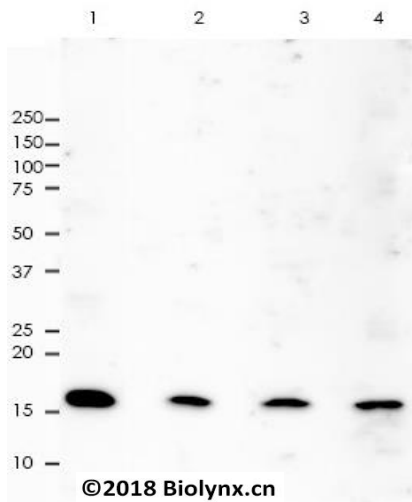
All lanes: Anti-Histone 3.1 antibody at 1:2,000 dilution

Predicted MW: 15 kDa
 Observed MW: 15 kDa

Lane 1: PC-12
 Lane 2: Raw264.7

Lysates at 10 µg per lane
 2nd Ab:
 GAR HRP(H+L) 1:5,000

Exposure: 20s

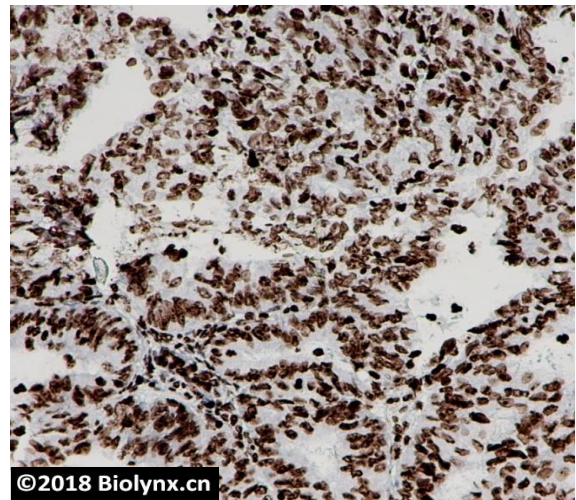


All lanes: Anti-Histone 3.1 antibody at 1:2,000 dilution

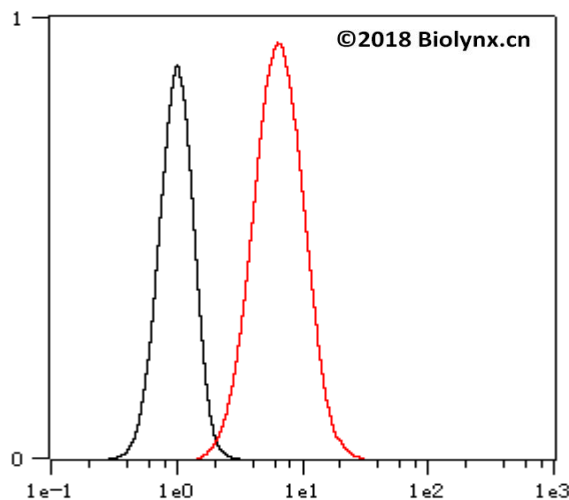
Predicted MW: 15 kDa
 Observed MW: 15 kDa

Lane 1: MDBK
 Lane 2: MDCK
 Lane 3: Cos-7
 Lane 4: Zebrafish

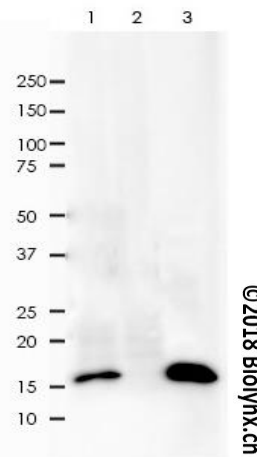
Lysates at 10 µg per lane
 2nd Ab:
 GAR HRP(H+L) 1:5,000
 Exposure: 60s



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) analysis of human endometrial cancer tissue labelling Histone 3.1 with RR692 at 1:800. Heat mediated antigen retrieval was performed using Tris/EDTA buffer pH 9.0.



Overlay histogram showing HeLa cells stained with RR692 (Red). The cells were fixed with 4% paraformaldehyde (10 min) and then permeabilized with 0.1% TritonX-100 for 15 min. The cells were then incubated in the antibody (RR692, 1:200 dilution) in 1x PBS/1% BSA for 30 min at room temperature. The secondary antibody used was a Goat Anti-Rabbit Alexa Fluor® 488 (IgG H+L) at 1:2,000 dilution for 20 min at room temperature. Unlabelled sample (Black) was used as a control.



Histone 3.1 was immunoprecipitated from 0.4mg of HeLa whole cell lysate with RR692 at 100 dilution.

2nd Ab:
 GAR HRP for IP 1:500

Lane 1: RR692 IP in HeLa whole cell lysate
 Lane 2: PBS instead of RR692 in HeLa whole cell lysate
 Lane 3: HeLa whole cell lysate, 10 µg (input)

Product QC'd by:



For research use only. Not for use in diagnostic or therapeutic applications.