

## HIST1H4A polyclonal antibody

Catalog: BS65009

Host: Rabbit

Reactivity: Human, Mouse

### BackGround:

The nucleosome, made up of four core histone proteins (H2A, H2B, H3, and H4), is the primary building block of chromatin. Originally thought to function as a static scaffold for DNA packaging, histones have now been shown to be dynamic proteins, undergoing multiple types of post-translational modifications, including acetylation, phosphorylation, methylation, and ubiquitination. Histone acetylation occurs mainly on the amino-terminal tail domains of histones H2A (Lys5), H2B (Lys5, 12, 15, and 20), H3 (Lys9, 14, 18, 23, 27, 36 and 56), and H4 (Lys5, 8, 12, and 16) and is important for the regulation of histone deposition, transcriptional activation, DNA replication, recombination, and DNA repair. Hyper-acetylation of the histone tails neutralizes the positive charge of these domains and is believed to weaken histone-DNA and nucleosome-nucleosome interactions, thereby destabilizing chromatin structure and increasing the accessibility of DNA to various DNA-binding proteins. In addition, acetylation of specific lysine residues creates docking sites for a protein module called the bromodomain, which binds to acetylated lysine residues. Many transcription and chromatin regulatory proteins contain bromodomains and may be recruited to gene promoters, in part, through binding of acetylated histone tails. Histone acetylation is mediated by histone acetyltransferases (HATs), such as CBP/p300, GCN5L2, PCAF, and Tip60, which are recruited to genes by DNA-bound protein factors to facilitate transcriptional activation. Deacetylation, which is mediated by histone deacetylases (HDAC and sirtuin proteins), reverses the effects of acetylation and generally facilitates transcriptional repression.

### Product:

Rabbit IgG, 1mg/ml in PBS with 0.02% sodium azide, 50% glycerol, pH7.4.

### Molecular Weight:

~ 17 kDa

### Swiss-Prot:

P62805

### Purification&Purity:

The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen and the purity is > 95% (by SDS-PAGE).

### Applications:

WB: 1:500~1:1000

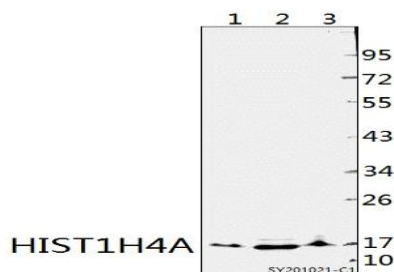
### Storage&Stability:

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

### Specificity:

HIST1H4A polyclonal antibody detects endogenous levels of HIST1H4A protein.

### DATA:



Western blot (WB) analysis of HIST1H4A polyclonal antibody at 1:500 dilution

Lane1:BV2 whole cell lysate(40ug)

Lane2:SHSY5Y whole cell lysate(40ug)

Lane3:HEK293T whole cell lysate(40ug)

### Note:

For research use only, not for use in diagnostic procedure.

### Bioworld Technology, Inc.

Add: 1660 South Highway 100, Suite 500 St. Louis Park, MN 55416, USA.

Email: [info@bioworld.com](mailto:info@bioworld.com)

Tel: 6123263284

Fax: 6122933841

### Bioworld technology, co. Ltd.

Add: No 9, weidi road Qixia District Nanjing, 210046, P. R. China.

Email: [info@biogot.com](mailto:info@biogot.com)

Tel: 0086-025-68037686

Fax: 0086-025-68035151



## PRODUCT DATA SHEET

Bioworld Technology, Inc.

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### **Bioworld Technology, Inc.**

**Add:** 1660 South Highway 100, Suite 500 St. Louis Park,  
MN 55416, USA.

**Email:** [info@bioworld.com](mailto:info@bioworld.com)

**Tel:** 6123263284

**Fax:** 6122933841

### **Bioworld technology, co. Ltd.**

**Add:** No 9, weidi road Qixia District Nanjing, 210046,  
P. R. China.

**Email:** [info@biogot.com](mailto:info@biogot.com)

**Tel:** 0086-025-68037686

**Fax:** 0086-025-68035151