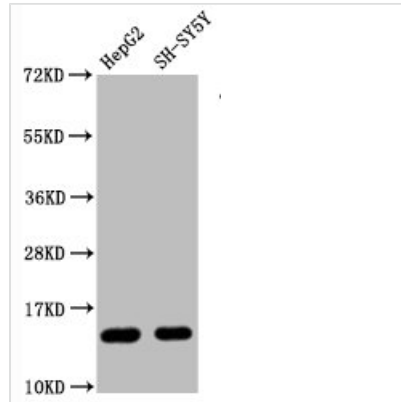




Mono-methyl-Histone H3.1 (R128) Recombinant Monoclonal Antibody

Product Code	CSB-RA010418A128me1HU
Abbreviation	Histone H3.1
Storage	Upon receipt, store at -20°C or -80°C. Avoid repeated freeze.
Uniprot No.	P68431
Immunogen	A synthesized peptide
Species Reactivity	Human, Mouse
Tested Applications	ELISA, WB; Recommended dilution: WB:1:500-1:2000
Relevance	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.
Form	Liquid
Conjugate	Non-conjugated
Storage Buffer	Rabbit IgG in phosphate buffered saline, pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol.
Purification Method	Affinity-chromatography
Isotype	Rabbit IgG
Clonality	Monoclonal
Alias	Histone H3.1, Histone H3/a, Histone H3/b, Histone H3/c, Histone H3/d, Histone H3/f, Histone H3/h, Histone H3/i, Histone H3/j, Histone H3/k, Histone H3/l, HIST1H3A, H3FA, AND, HIST1H3B, H3FL, AND, HIST1H3C, H3FC, AND, HIST1H3D, H3FB, AND, HIST1H3E, H3FD, AND, HIST1H3F, H3FI, AND, HIST1H3G, H3FH, AND, HIST1H3H, H3FK, AND, HIST1H3I, H3FF, AND, HIST1H3J, H3FJ
Immunogen Species	Homo sapiens (Human)
Research Area	Epigenetics and Nuclear Signaling
Gene Names	HIST1H3A
Clone No.	4G12
Image	


Western Blot

Positive WB detected in HepG2 whole cell lysate, SH-SY5Y whole cell lysate

All lanes Mono-methyl-Histone

H3.1(R128)antibody at 0.87μg/ml

Secondary

Goat polyclonal to rabbit IgG at 1/50000 dilution

Predicted band size: 15 KDa

Observed band size: 15 KDa

Description

The mono-methyl-histone H3.1 (R128) recombinant monoclonal antibody production process initiates with the cloning of genes responsible for encoding the HIST1H3A antibody, covering both heavy and light chains. These cloned genes are integrated into expression vectors, which are introduced into host cells via transfection. The host cells assume the task of producing and secreting the antibody. After purification through affinity chromatography to guarantee its purity, the antibody undergoes comprehensive functionality testing in ELISA and WB applications, ensuring accurate detection of the human and mouse HIST1H3A proteins mono-methylated at R128.

Histone H3.1 mono-methylation at arginine 128 (R128) may promote transcriptional activation or repression depending on the context and the specific proteins involved. H3.1 R128 mono-methylation can serve as an epigenetic signal, indicating specific chromatin states and influencing cellular processes such as differentiation, development, and cellular identity.