

Anti-Histone H3

Rabbit Polyclonal Antibody

Catalog # H12-63R

Lot # B3216-48

Cited Applications

ELISA, WB

Ideal working dilutions for each application should be empirically determined by the investigator.

Specificity

Recognizes the human Histone 3 protein

Cross Reactivity

Human, Mouse, Rat, Chicken, Dog, Monkey, *Xenopus laevis*, *Arabidopsis thaliana*, *Caenorhabditis elegans* and fruit fly

Host/Isotype/Clone#

Rabbit, antiserum

Immunogen

The antibody was produced against synthesized peptide corresponding to the C-Terminus region of human histone 3

Formulation

0.02 M Potassium Phosphate, 0.15 M Sodium Chloride, pH 7.2 + 0.01% (w/v) Sodium Azide

Stability

1yr at -20°C from date of shipment

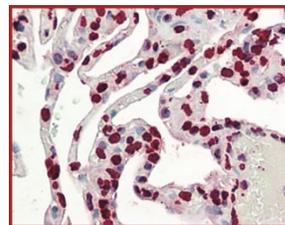
Scientific Background

Histone H3 is one of the five main histone proteins involved in the structure of chromatin in eukaryotic cells. Histone proteins are highly post-translationally modified with Histone H3 being the most extensively modified of the five histones. The N-terminal tail of histone H3 protrudes from the globular nucleosome core and can undergo several different types of post-translational modification that influence cellular processes. 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. Histone H3 Antibody is ideal for investigators involved in Cell Signaling, Epigenetics, Nuclear Signaling research and Signal Transduction research.

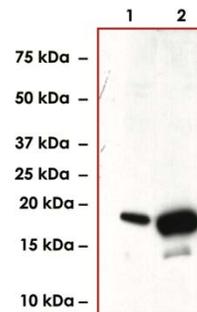
References:

- Peterson, C. L., et al.: Histones and histone modifications. *Current Biology*. 2004; 14(14): R546-R551. doi:10.1016/j.cub.2004.07.007.
- Hake, S. B., et al.: Histone H3 variants and their potential role in indexing mammalian genomes: the "H3 barcode hypothesis". *Proceedings of the National Academy of Sciences of the United States of America*. 2006; 103(17): 6428-6435. doi:10.1073/pnas.0600803103.

Sample Data



Immunohistochemical analysis of formalin fixed, paraffin embedded lung tissues using anti-histone H3 antibody (1:100)



Western Blot of Anti-Histone 3 antibody (1:2000). Lane 1: Raji lysate. Lane 2: HeLa lysate. Load: 15ug, 25ug respectively.

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Purification	Delipidation and defibrination
Stability	1yr at -20°C from date of shipment
Storage & Shipping	Store product at -20°C. For optimal storage, aliquot antibody into smaller quantities after centrifugation and store at recommended temperature. For optimal performance, avoid repeated handling and multiple freeze/thaw cycles. Product shipped on ice packs.

To place your order, please contact us by phone 1-(604)-232-4600, fax 1-604-232-4601 or by email: orders@signalchem.com
www.signalchem.com

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