

Recombinant Histone H3 (Acetyl Lys4) Monoclonal Antibody

catalog number: **AN301407L**

Note: Centrifuge before opening to ensure complete recovery of vial contents.

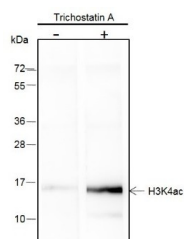
Description

Reactivity	Human;Rat;Mouse
Immunogen	Acetylated human histone H3 (Lys4) peptide
Host	Rabbit
Isotype	IgG, κ
Clone	A102
Purification	Protein A purified
Buffer	PBS, 50% glycerol, 0.05% Proclin 300, 0.05% protein protectant.

Applications Recommended Dilution

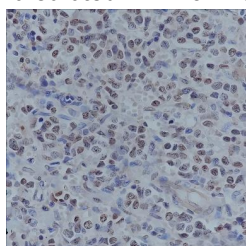
WB	1:500-1:2000
IHC	1:50-1:100
IF	1:50-1:100

Data

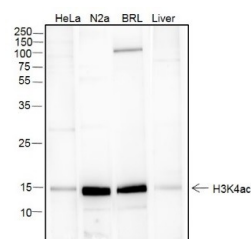


Western Blot with Histone H3 (Acetyl Lys4) Monoclonal Antibody at dilution of 1:2000. (-) HeLa, (+) HeLa+Trichostatin A(2 μ M, 4hr)

Observed-MW:15 kDa
Calculated-MW:15 kDa

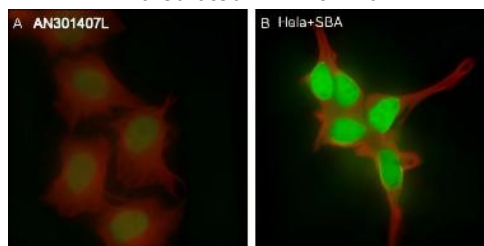


Immunohistochemistry of paraffin-embedded Human neuroblastoma using Histone H3 (Acetyl Lys4) Monoclonal Antibody at dilution of 1:100.



Western Blot with Histone H3 (Acetyl Lys4) Monoclonal Antibody at dilution of 1:2000. Lane 1: HeLa, Lane 2: N2a, Lane 3: BRL, Lane 4: Mouse liver

Observed-MW:15 kDa
Calculated-MW:15 kDa



Immunofluorescent analysis of (4% Paraformaldehyde) fixed (A) HeLa, (B) HeLa + SBA (5 mM, 24h) cells using anti-Histone H3 (Acetyl Lys4) Monoclonal Antibody at dilution of 1:100.

Preparation & Storage

Storage	Store at -20°C Valid for 12 months. Avoid freeze / thaw cycles.
Shipping	Ice bag

Background

For Research Use Only

Histone post-translational modifications (PTMs) are key mechanisms of epigenetics that modulate chromatin structures, termed as “histone code”. The PTMs on histone including acetylation, methylation, phosphorylation and novel acylations directly affect the accessibility of chromatin to transcription factors and other epigenetic regulators, altering genome stability, gene transcription, etc. Histone acetylation occurs primarily at multiple lysine residues on the amino-terminal of core histones, in response to various stimuli and plays vital roles in the regulation of gene expression, DNA damage repair, chromatin dynamics, etc. Mostly, histone H2A is primarily acetylated at Lys5, 9, 15, and 36; H2B is primarily acetylated at Lys5, 12, 15, 16, and 20. Histone H3 is primarily acetylated at Lys4, 9, 14, 18, 23, 27, 56, and 79. Histone H4 is primarily acetylated at Lys5, 8, 12, 16, and 20. Histone acetyltransferases (HATs) and histone deacetylases (HDACs) are major regulating factors.