

Monoclonal Antibody to Ne acetyl lysine - Ascites

Catalog No.: AM10204SU-N

Quantity: 0.2 ml

Background: the nucleus, DNA is tightly packed into nucleosomes generating an environment which is highly repressive towards DNA processes such as transcription. Acetylation of lysine residues within proteins has emerged as an important mechanism used by cells to overcome this repression. The acetylation of non-histone proteins such as transcription factors, as well as histones appears to be involved in this process. Acetylation may result in structural transitions as well as specific signaling within discrete chromatin domains. The role of acetylation in intracellular signaling has been inferred from the binding of acetylated peptides by the conserved bromodomain. Furthermore, recent findings suggest that bromodomain/acetylated-lysine recognition can serve as a regulatory mechanism in protein-protein interactions in numerous cellular processes such as chromatin remodeling and transcriptional activation. The reversible lysine acetylation of histones and non-histone proteins plays a vital role in the regulation of many cellular processes including chromatin dynamics and transcription, gene silencing, cell cycle progression, apoptosis, differentiation, DNA replication, DNA repair, nuclear import, and neuronal repression. More than 20 acetyltransferases and 18 deacetylases have been identified so far, but the mechanistic details of substrate selection and site specificity of these enzymes remain unclear. Over 40 transcription factors and 30 other nuclear, cytoplasmic, bacterial, and viral proteins have been shown to be acetylated in vivo.

Host / Isotype: Mouse / IgG1

Clone: 11A1

Immunogen: Nε acetyl lysine

Format: **State:** Lyophilized powder
Preservatives: None
Reconstitution: Restore in distilled water.

Applications: **ELISA:** 1/5000-1/50000.
Western Blot: 1/500-1/5000.
Immunohistochemistry: 1/500-1/5000.
Other applications not tested. Optimal dilutions are dependent on conditions and should be determined by the user.

Specificity: Reacts with the Nε acetyl lysine, N-acetyl lysine and acetylated histones.
Does not cross react with either propionyl lysine or butyryl lysine.
The ability of this antibody to fix complement is unknown.

Storage:

Prior to reconstitution store the antibody at -20°C.
Store reconstituted antibody at 2-8°C for one month or (in aliquots) at -20°C for longer.
Avoid repeated freezing and thawing.
Shelf life: one year from despatch.

Pictures:

Western Blot analysis using Ne acetyl lysine antibody *Cat.-No* AM10204SU-N:
Lane 1: Acetylated histones from calf thymus.
Lane 2: Standard staining after preincubation of the antibody with 200 µM of Ne acetyl lysine.

