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Anti-Histone H4 (Tyr-72), Phosphospecific Antibody

Catalog # AN1812

Specification

Anti-Histone H4 (Tyr-72), Phosphospecific Antibody - Product Information

Primary Accession	P62805
Reactivity	**Bovine, Chicken, Drosophila, C.Elegans**
Host	**Rabbit**
Clonality	**Rabbit Polyclonal**
Isotype	**IgG**
Calculated MW	**11367**

Anti-Histone H4 (Tyr-72), Phosphospecific Antibody - Additional Information

Gene ID	**121504;554313;8294;8359;8360;8361;8362;8363;8364;8365;8366;8367;8368;8370**

Other Names
Hist1H4 Histone H4

Target/Specificity
Chromatin structure is regulated through the activity of core histones (H2A, H2B, H3, and H4) that form the nucleosome. Histone activity is regulated by a variety of post-translational modifications, including acetylation, phosphorylation, and methylation. Histone acetylation and methylation occur primarily at lysine (K) residues in the amino-terminal tail domain. These modifications are important for the regulation of histone deposition, transcriptional activation, DNA replication and repair. Acetylation and methylation of specific lysine residues creates docking sites for DNA repair, transcription, and chromatin regulatory proteins. Methylation of histones may be regulated by phosphorylation events at sites downstream of the N-terminal tail. In histone H4, both EGFR activation and inonizing radiation induce EGFR nuclear translocation and Histone H4 (Tyr-72) phosphorylation, which creates a docking site for Set8 methyltransferase. This promotes K20 methylation in Histone H4 leading to DNA synthesis and repair.

Storage
Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions
Anti-Histone H4 (Tyr-72), Phosphospecific Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

Shipping
Blue Ice

Anti-Histone H4 (Tyr-72), Phosphospecific Antibody - Protocols

Provided below are standard protocols that you may find useful for product applications.

- Western Blot

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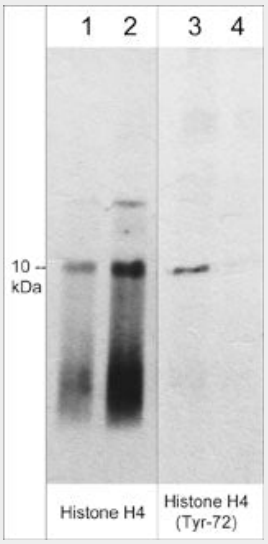
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

Anti-Histone H4 (Tyr-72), Phosphospecific Antibody - Images



Western blot image of human PC3 cells untreated (lanes 1 & 3) or treated with alkaline phosphatase to dephosphorylate histone H4 (lanes 2 and 4). The blot was probed with rabbit polyclonals anti-Histone H4 (lanes 1 & 2) and anti-Histone H4 (Tyr-72) phospho-specific antibody (lanes 3 & 4).

Anti-Histone H4 (Tyr-72), Phosphospecific Antibody - Background

Chromatin structure is regulated through the activity of core histones (H2A, H2B, H3, and H4) that form the nucleosome. Histone activity is regulated by a variety of post-translational modifications, including acetylation, phosphorylation, and methylation. Histone acetylation and methylation occur primarily at lysine (K) residues in the amino-terminal tail domain. These modifications are important for the regulation of histone deposition, transcriptional activation, DNA replication and repair. Acetylation and methylation of specific lysine residues creates docking sites for DNA repair, transcription, and chromatin regulatory proteins. Methylation of histones may be regulated by phosphorylation events at sites downstream of the N-terminal tail. In histone H4, both EGFR activation and inonizing radiation induce EGFR nuclear translocation and Histone H4 (Tyr-72) phosphorylation, which creates a docking site for Set8 methyltransferase. This promotes K20 methylation in Histone H4 leading to DNA synthesis and repair.