3050 Spruce Street, St. Louis, MO 63103 USA
Tel: (800) 521-8956 (314) 771-5765 Fax: (800) 325-5052 (314) 771-5757
email: techservice@sial.com sigma-aldrich.com

Product Information

Monoclonal anti-Histone H3 (C-terminal), clone H6.10
produced in mouse, purified from hybridoma cell culture

Catalog Number **SAB4200651**

Product Description

Monoclonal Anti-Histone H3 (C-terminal) (mouse IgG1 isotype) is derived from the hybridoma H6.10 produced by the fusion of mouse myeloma cells and splenocytes from BALB/c mice immunized with a synthetic peptide corresponding to a sequence at the C terminal region of human Histone H3 (GeneID: 8350), conjugated to KLH. The isotype is determined by ELISA using Mouse Monoclonal Antibody Isotyping Reagents, Catalog Number ISO2. The antibody is purified from culture supernatant of hybridoma cells grown in a bioreactor.

Monoclonal Anti-Histone H3 (C-terminal) recognizes human, canine, hamster, monkey and chicken Histone H3. The product may be used in several immunochemical techniques including immunoblotting (~14 kDa) and immunofluorescence.

Histones are subjected to several covalent modifications, such as phosphorylation, methylation, acetylation and ubiquitination, that affect chromatin structure and regulate chromatin activity.[1,2] Histone modifications are thought to play an important role in cancer and disease.[3] These modifications may alter chromatin structure and recruit downstream chromatin-associated proteins involved in transcription regulation chromatin condensation, mitosis, and heterochromatin assembly. These in turn, may dictate dynamic transitions between transcriptionally active or silent chromatin states. Histones H3 and H4 are the predominant histones subjected to extensive covalent modifications.[4,5] Mutations in histone H3 were identified in various tumors.[6]

Reagent

Supplied as a solution in 0.01 M phosphate buffered saline, pH 7.4, containing 15 mM sodium azide as a preservative.

Antibody Concentration: ~ 1.0 mg/mL

Precautions and Disclaimer

This product is for R&D use only, not for drug, household, or other uses. Please consult the Material Safety Data Sheet for information regarding hazards and safe handling practices.

Storage/Stability

For extended storage, freeze at –20 °C in working aliquots. Repeated freezing and thawing or storage in "frost-free" freezers is not recommended. If slight turbidity occurs upon prolonged storage, clarify the solution by centrifugation before use. Working dilution samples should be discarded if not used within 12 hours.

Product Profile

Immunoblotting: a working concentration of 0.25-0.5 µg/mL is recommended using histones isolated from human HeLa cells.

Immunofluorescence: a working concentration of 5-10 µg/mL is recommended using HeLa cells.

Note: In order to obtain the best results using various techniques and preparations, we recommend determining optimal working dilutions by titration. Use of sensitive film is recommended.

References

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5. Garcia, B.A., et al., *J. Biol. Chem*., **282**, 7632-7640 (2007).
6. Yuen, B.T., and Knoepfler, P.S., *Cancer Cell,* **24,** 567-574 (2013).

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