

MacroH2A (h): 293 Lysate: sc-111902

BACKGROUND

Eukaryotic histones are water soluble, basic nuclear proteins that form hetero-octameric nucleosome particles by wrapping 146 base pairs of DNA in a left-handed super-helical turn sequentially to form chromosomal fiber. Two molecules of each of the four core histones (H2A, H2B, H3, and H4) form the octamer. The octamer consists of two H2A-H2B dimers and two H3-H4 dimers, forming two nearly symmetrical halves by tertiary structure. MacroH2A, also called core histone MacroH2A2 (mH2A2), is a variant Histone H2A, originally isolated in rat liver, that is nearly three times as large as conventional H2A. MacroH2A may be involved in stable X chromosome inactivation as it is enriched in inactive X chromosome chromatin.

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: H2AFY2 (human) mapping to 10q22.1.

RESEARCH USE

For research use only, not for use in diagnostic procedures.

PRODUCT

MacroH2A (h): 293 Lysate represents a lysate of human MacroH2A transfected 293 cells and is provided as 100 µg protein in 200 µl SDS-PAGE buffer.

APPLICATIONS

MacroH2A (h): 293 Lysate is suitable as a Western Blotting positive control for human reactive MacroH2A antibodies. Recommended use: 10-20 µl per lane.

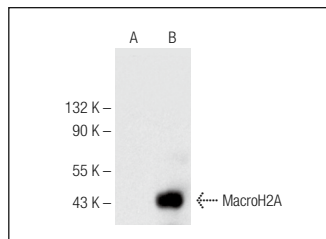
Control 293 Lysate: sc-110760 is available as a Western Blotting negative control lysate derived from non-transfected 293 cells.

MacroH2A (C-9): sc-377452 is recommended as a positive control antibody for Western Blot analysis of enhanced human MacroH2A expression in MacroH2A transfected 293 cells (starting dilution 1:100, dilution range 1:100-1:1,000).

RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended:
1) Western Blotting: use m-IgGκ BP-HRP: sc-516102 or m-IgGκ BP-HRP (Cruz Marker): sc-516102-CM (dilution range: 1:1000-1:10000), Cruz Marker™ Molecular Weight Standards: sc-2035, UltraCruz® Blocking Reagent: sc-516214 and Western Blotting Luminol Reagent: sc-2048.

DATA



MacroH2A (C-9): sc-377452. Western blot analysis of MacroH2A expression in non-transfected: sc-110760 (A) and human MacroH2A transfected: sc-111902 (B) 293 whole cell lysates.

STORAGE

Store at -20° C. Repeated freezing and thawing should be minimized. Sample vial should be boiled once prior to use. Non-hazardous. No MSDS required.

PROTOCOLS

See our web site at www.scbt.com for detailed protocols and support products.