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SANTA CRUZ BIOTECHNOLOGY, INC.

Histone H2A.X (m): 293T Lysate: sc-120804

BACKGROUND

Histone H2A.X is a member of the Histone H2A family, which is involved in nucleosomal organization of chromatin. The H2AFX gene is located in close proximity to the porphobilinogen deaminase (PBGD) gene in both mouse and human, and maps to chromosome 9 and 11q23, respectively. H2A.X differs from the other members of the H2A family by the presence of a highly conserved C-terminal motif. It is rapidly phosphorylated in response to ionizing radiation and plays an important role in the recognition and repair of DNA double stranded breaks. The phosphorylated form of H2A.X, designated γ- H2A.X, forms nuclear foci at the heavy chain constant region of cells involved in class switch recombination (CSR), a region-specific DNA reaction that replaces one immunoglobulin heavy chain constant region gene with another. The phosphorylated γ-H2A.X is also thought to initiate subsequent repair factors, including Rad50, Rad51 and BRCA1.

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: H2afx (mouse) mapping to 9 A5.2.

PRODUCT

Histone H2A.X (m): 293T Lysate represents a lysate of mouse Histone H2A.X transfected 293T cells and is provided as 100 µg protein in 200 µl SDS-PAGE buffer.

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.

APPLICATIONS

Histone H2A.X (m): 293T Lysate is suitable as a Western Blotting positive control for mouse reactive Histone H2A.X antibodies. Recommended use: 10-20 µl per lane.

Control 293T Lysate: sc-117752 is available as a Western Blotting negative control lysate derived from non-transfected 293T cells.

RESEARCH USE

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

PROTOCOLS

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