



Histone H2A.F/Z (h): 293T Lysate: sc-111828

BACKGROUND

Histone H2A.Z/H2A.F/Z (H2A/z) is a 128 amino acid protein encoded by the human gene H2AFZ. Eukaryotic histones are basic and water soluble nuclear proteins that form hetero-octameric nucleosome particles by wrapping 146 base pairs of DNA sequentially in a left-handed, super-helical turn to form chromosomal fiber. Two molecules of each of the four core histones (H2A, H2B, H3 and H4) form the octamer, which is comprised of two H2A-H2B dimers and two H3-H4 dimers, creating two nearly symmetrical halves by tertiary structure. H2A.Z/H2A.F/Z is a variant Histone H2A which replaces conventional H2A in a subset of nucleosomes. Nucleosomes wrap and compact DNA into chromatin, limiting DNA accessibility to the cellular machineries which require DNA as a template. Histones thereby play a central role in transcription regulation, DNA repair, DNA replication and chromosomal stability. DNA accessibility is regulated via a complex set of posttranslational modifications of histones, also called histone code, and nucleosome remodeling. H2A.Z/H2A.F/Z may be involved in the formation of constitutive heterochromatin and may be required for chromosome segregation during cell division.

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: H2AFV (human) mapping to 7p13.

PRODUCT

Histone H2A.F/Z (h): 293T Lysate represents a lysate of human Histone H2A.F/Z transfected 293T cells and is provided as 100 µg protein in 200 µl SDS-PAGE buffer.

APPLICATIONS

Histone H2A.F/Z (h): 293T Lysate is suitable as a Western Blotting positive control for human reactive Histone H2A.F/Z 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.

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.

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.