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SZABO-SCANDIC HandelsgmbH

Quellenstraße 110, A-1100 Wien

T. +43(0)1 489 3961-0

F. +43(0)1 489 3961-7

mail@szabo-scandic.com

www.szabo-scandic.com

linkedin.com/company/szaboscandic

SANTA CRUZ BIOTECHNOLOGY, INC.

Histone H3.3A (h3): 293T Lysate: sc-159580

BACKGROUND

Eukaryotic histones are basic and water soluble 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; formed of two H2A-H2B dimers and two H3-H4 dimers, forming two nearly symmetrical halves by tertiary structure. Histones are subject to posttranslational modification by enzymes primarily on their N-terminal tails, but also in their globular domains. Histone H3.3A, also known as H3F3, is a 136 amino acid nuclear protein that is expressed throughout the cell cycle and is the predominant form of Histone H3 in non-dividing cells. Characteristic of most Histone proteins, Histone H3.3A can undergo a variety of post-translational modifications, including acetylation, phosphorylation, methylation and ubiquitination, all of which may modify the activity of Histone H3.3A.

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CHROMOSOMAL LOCATION

Genetic locus: H3F3A (human) mapping to 1q42.12.

PRODUCT

Histone H3.3A (h3): 293T Lysate represents a lysate of human Histone H3.3A transfected 293T cells and is provided as 100 µg protein in 200 µl SDS-PAGE buffer.

APPLICATIONS

Histone H3.3A (h3): 293T Lysate is suitable as a Western Blotting positive control for human reactive Histone H3.3A 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.