

Histone H3 (FL-136): sc-10809

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. Over 80% of nucleosomes contain the linker Histone H1, derived from an intronless gene, that interacts with linker DNA between nucleosomes and mediates compaction into higher order chromatin. Histones are subject to posttranslational modification by enzymes primarily on their N-terminal tails, but also in their globular domains. Such modifications include methylation, citrullination, acetylation, phosphorylation, sumoylation, ubiquitination and ADP-ribosylation.

SOURCE

Histone H3 (FL-136) is a rabbit polyclonal antibody raised against amino acids 1-136 representing full length Histone H3 of human origin.

PRODUCT

Each vial contains 200 µg IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Available as TransCruz reagent for ChIP application, sc-10809 X, 200 µg/0.1 ml.

APPLICATIONS

Histone H3 (FL-136) is recommended for detection of Histone H3 of mouse, rat, human, *Drosophila*, *Xenopus* and *C. elegans* origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

Histone H3 (FL-136) is also recommended for detection of Histone H3 in additional species, including equine, canine, bovine, porcine and avian.

Histone H3 (FL-136) X TransCruz antibody is recommended for ChIP assays.

Molecular Weight of Histone H3: 15 kDa.

Positive Controls: Histone H3.3B (m): 293T Lysate: sc-125446, Jurkat whole cell lysate: sc-2204 or A-431 whole cell lysate: sc-2201.

STORAGE

Store at 4° C, **DO NOT FREEZE**. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

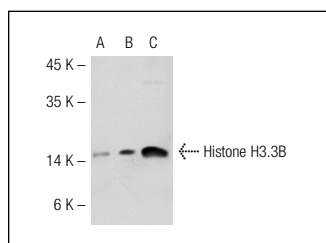
PROTOCOLS

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

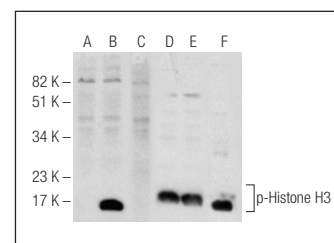
RESEARCH USE

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

DATA



Histone H3 (FL-136): sc-10809. Western blot analysis of Histone H3.3B expression in non-transfected 293T: sc-117752 (A), mouse Histone H3.3B transfected 293T: sc-125446 (B) and HeLa (C) whole cell lysates.



Western blot analysis of Histone H3 phosphorylation in untreated (A,D), calyculin A treated (B,E) and calyculin A and lambda protein phosphatase (sc-200312A) treated (C,F) Jurkat whole cell lysates. Antibodies tested include p-Histone H3 (C-2): sc-374669 (A,B,C) and Histone H3 (FL-136): sc-10809 (D,E,F).

SELECT PRODUCT CITATIONS

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- Turner, E.C., et al. 2011. Identification of an interaction between the TPα; and TPβ isoforms of the human thromboxane A2 receptor with protein kinase C-related kinase (PRK) 1. Implications for prostate cancer. *J. Biol. Chem.* 286: 15440-15457.
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