SANTA CRUZ BIOTECHNOLOGY, INC.

Histone H1⁰ (H-85): sc-67324



BACKGROUND

Histone H1⁰ (H1 histone family, member 0) is a lysine-rich member of the H1 family of linker histones. The H1 family of proteins interacts with linker DNA between nucleosomes and mediates compaction into higher order chromatin. Histone H1⁰ is a unique variant, considered a replacement linker histone, which is expressed and incorporated into chromatin in the absence of DNA replication. In contrast, the majority of somatic H1 histones are replicationdependent variants found in proliferating cells. Histone H1⁰ is expressed in cells that are in the terminal stages of differentiation or that have low rates of cell division. Unlike other differentiation-specific linker histones which demonstrate tissue and species-specific expression, Histone H1⁰ is widely expressed in many tissues in most vertebrates. Histone H1⁰ is derived from an intronless gene, H1F0, which has been mapped to human chromosome 22q13.1. 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, ubiguitination and ADP-ribosylation.

CHROMOSOMAL LOCATION

Genetic locus: H1F0 (human) mapping to 22q13.1; H1f0 (mouse) mapping to 15 E1.

SOURCE

Histone H1⁰ (H-85) is a rabbit polyclonal antibody raised against amino acids 1-85 mapping at the N-terminus of Histone H1⁰ of human origin.

PRODUCT

Each vial contains 200 μ g lgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

APPLICATIONS

Histone H1⁰ (H-85) is recommended for detection of Histone H1⁰ of mouse, rat and human 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), immunohistochemistry (including paraffinembedded sections) (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 H1⁰ (H-85) is also recommended for detection of Histone H1⁰ in additional species, including equine, canine, bovine and porcine.

Suitable for use as control antibody for Histone H1⁰ siRNA (h): sc-62460, Histone H1⁰ siRNA (m): sc-62461, Histone H1⁰ shRNA Plasmid (h): sc-62460-SH, Histone H1⁰ shRNA Plasmid (m): sc-62461-SH, Histone H1⁰ shRNA (h) Lentiviral Particles: sc-62460-V and Histone H1⁰ shRNA (m) Lentiviral Particles: sc-62461-V.

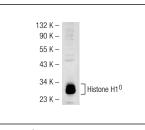
Molecular Weight of Histone H10: 32 kDa.

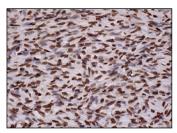
Positive Controls: Sol8 cell lysate: sc-2249, A-431 whole cell lysate: sc-2201 or Jurkat whole cell lysate: sc-2204.

RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use goat anti-rabbit IgG-HRP: sc-2004 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible goat anti-rabbit IgG-HRP: sc-2030 (dilution range: 1:2000-1:5000), Cruz Marker™ Molecular Weight Standards: sc-2035, TBS Blotto A Blocking Reagent: sc-2333 and Western Blotting Luminol Reagent: sc-2048. 2) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) Immunofluorescence: use goat anti-rabbit IgG-FITC: sc-2012 (dilution range: 1:100-1:400) or goat anti-rabbit IgG-TR: sc-2780 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941. 4) Immuno-histochemistry: use ImmunoCruz™: sc-2051 or ABC: sc-2018 rabbit IgG Staining Systems.

DATA





Histone $\rm H1^0$ (H-85): sc-67324. Western blot analysis of Histone $\rm H1^0$ expression in Sol8 whole cell lysate.

Histone H1⁰ (H-85): sc-67324. Immunoperoxidase staining of formalin fixed, paraffin-embedded human ovary tissue showing nuclear staining of ovarian stroma cells.

STORAGE

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

RESEARCH USE

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

PROTOCOLS

MONOS

Satisfation

Guaranteed

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

Try Histone H1⁰ (34): sc-56695 or Histone H1⁰

(F-10): sc-377468, our highly recommended monoclonal alternatives to Histone H1⁰ (H-85).