**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.

**REFERENCES**


**SOURCE**

Histone H4 (F-9) is a mouse monoclonal antibody raised against amino acids 7-103 of Histone H4 of human origin.

**PRODUCT**

Each vial contains 200 µg IgG1 kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Histone H4 (F-9) is available conjugated to agarose (sc-25260 AC), 500 µg/0.25 ml agarose in 1 ml, for IP; to either phycoerythrin (sc-25260 PE), fluorescein (sc-25260 FITC), Alexa Fluor® 488 (sc-25260 AF488), Alexa Fluor® 546 (sc-25260 AF546), Alexa Fluor® 594 (sc-25260 AF594) or Alexa Fluor® 647 (sc-25260 AF647), 200 µg/ml, for WB (RGB), IF, IHC(p) and FCM; and to either Alexa Fluor® 680 (sc-25260 AF680) or Alexa Fluor® 790 (sc-25260 AF790), 200 µg/ml, for Near-Infrared (NIR) WB, IF and FCM.

Alexa Fluor® is a trademark of Molecular Probes, Inc., Oregon, USA

**APPLICATIONS**

Histone H4 (F-9) is recommended for detection of Histone H4 of mouse, rat and human origin by Western Blotting (starting dilution 1:100, dilution range 1:100-1:500), 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 H4 (F-9) is also recommended for detection of Histone H4 in additional species, including equine, canine, bovine, porcine and avian.

Molecular Weight of acetylated and non-acetylated Histone H4: 11 kDa.

Molecular Weight of hyper-acetylated Histone H4: 35 kDa.

Positive Controls: HeLa whole cell lysate: sc-2200, MCF7 whole cell lysate: sc-2206 or SK-N-MC cell lysate: sc-2237.

**STORAGE**

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

**DATA**

**SELECT PRODUCT CITATIONS**


**RESEARCH USE**

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

Alexa Fluor® is a trademark of Molecular Probes, Inc., Oregon, USA