Histone H3 (1G1): sc-517576

**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**


**CHROMOSOMAL LOCATION**

Genetic locus: HIST1H3A (human) mapping to 6p22.2; Hist1h3a (mouse) mapping to 13 A3.1.

**SOURCE**

Histone H3 (1G1) is a mouse monoclonal antibody raised against recombinant Histone H3 protein fragments of human origin.

**PRODUCT**

Each vial contains 100 µg IgG in 1.0 ml of PBS with < 0.1% sodium azide, 0.1% gelatin and 1% glycerol.

**APPLICATIONS**

Histone H3 (1G1) is recommended for detection of Histone H3 of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000) and immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500).

Suitable for use as control antibody for Histone H3 siRNA: sc-37980, Histone H3 siRNA (m): sc-37981, Histone H3 siRNA Plasmid (h): sc-37980-SH, Histone H3 shRNA Plasmid (m): sc-37981-SH, Histone H3 shRNA (h) Lentiviral Particles: sc-37980-V and Histone H3 shRNA (m) Lentiviral Particles: sc-37981-V.

Molecular Weight of Histone H3: 15 kDa.

**STORAGE**

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

**SELECT PRODUCT CITATIONS**


**RESEARCH USE**

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