

# HIST2H4A(20Me3) Antibody

Purified Mouse Monoclonal Antibody Catalog # AO2148a

#### **Product Information**

**Application** FC, E **Primary Accession** P62805 Reactivity Human Host Mouse Monoclonal Clonality **Clone Names** 7A2E10 Isotype IgG1 **Calculated MW** 11367

**Description** Histones are basic nuclear proteins that are responsible for the nucleosome

structure of the chromosomal fiber in eukaryotes. This structure consists of approximately 146 bp of DNA wrapped around a nucleosome, an octamer composed of pairs of each of the four core histones (H2A, H2B, H3, and H4). The chromatin fiber is further compacted through the interaction of a linker histone, H1, with the DNA between the nucleosomes to form higher order chromatin structures. This gene is intronless and encodes a member of the histone H4 family. Transcripts from this gene lack polyA tails; instead, they contain a palindromic termination element. This gene is found in a histone cluster on chromosome 1. This gene is one of four histone genes in the cluster that are duplicated; this record represents the centromeric copy.

Immunogen Synthesized peptide of human HIST2H4A (AA: GGAKRHRK(Me3)VLRDNIQ).

**Formulation** Purified antibody in PBS with 0.05% sodium azide

## **Additional Information**

**Gene ID** 121504;554313;8294;8359;8360;8361;8362;8363;8364;8365;8366;8367;8368;

8370

Other Names Histone H4, H4C1, H4/A, H4FA, HIST1H4A

**Dilution** FC~~1/200 - 1/400 E~~1/10000

**Storage** Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store

at -20°C in small aliquots to prevent freeze-thaw cycles.

**Precautions** HIST2H4A(20Me3) Antibody is for research use only and not for use in

diagnostic or therapeutic procedures.

#### **Protein Information**

Name H4C1

Synonyms H4/A, H4FA, HIST1H4A

**Function** Core component of nucleosome. Nucleosomes wrap and compact DNA into

chromatin, limiting DNA accessibility to the cellular machineries which require DNA as a template. Histones thereby play a central role in transcription regulation, DNA repair, DNA replication and chromosomal stability. DNA accessibility is regulated via a complex set of post-translational modifications

of histones, also called histone code, and nucleosome remodeling.

Cellular Location Nucleus {ECO:0000250 | UniProtKB:P62806}. Chromosome. Note=Localized to

the nucleus when acetylated in step 11 spermatids.

{ECO:0000250 | UniProtKB:P62806}

### References

1.J Virol. 2011 Dec;85(24):13234-52.2.Mol Cell. 2011 Dec 23;44(6):918-27.

# **Images**

