

Macro H2A.1 Rabbit mAb

Catalog # AP75686

Product Information

ApplicationWB, ICCPrimary Accession075367ReactivityMouse, RatHostRabbit

Clonality Monoclonal Antibody

Calculated MW 39184

Additional Information

Gene ID 9555

Other Names MACROH2A1

Dilution WB~~1/500-1/1000 ICC~~N/A

Format Liquid

Protein Information

Name MACROH2A1 (HGNC:4740)

Function Variant histone H2A which replaces conventional H2A in a subset of

nucleosomes where it represses transcription (PubMed:12718888, PubMed:15621527, PubMed:16428466). Nucleosomes wrap and compact DNA into chromatin, limiting DNA accessibility to the cellular machineries which require DNA as a template (PubMed:15897469). Histones thereby play a central role in transcription regulation, DNA repair, DNA replication and chromosomal stability (PubMed:15897469). DNA accessibility is regulated via a complex set of post-translational modifications of histones, also called histone code, and nucleosome remodeling. Involved in stable X chromosome inactivation (PubMed:15897469). Inhibits the binding of transcription factors, including NF-kappa-B, and interferes with the activity of remodeling SWI/SNF

complexes (PubMed:<u>12718888</u>, PubMed:<u>16428466</u>). Inhibits histone acetylation by EP300 and recruits class I HDACs, which induces a

hypoacetylated state of chromatin (PubMed:<u>16107708</u>, PubMed:<u>16428466</u>).

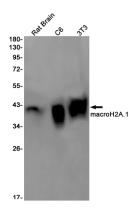
Cellular Location Nucleus. Chromosome. Note=Enriched in inactive X chromosome chromatin

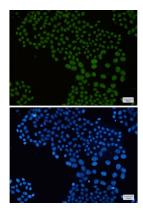
and in senescence-associated heterochromatin (PubMed:15621527,

PubMed:15897469, PubMed:9634239). Recruited to DNA damage sites in an

APLF-dependent manner (PubMed:21211722, PubMed:29905837).

Tissue Location Widely expressed..





Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.