

## Macro H2A.1 Rabbit mAb

Catalog No: #52403

Package Size: #52403-1 50ul #52403-2 100ul

Orders: order@signalwayantibody.com

Support: tech@signalwayantibody.com

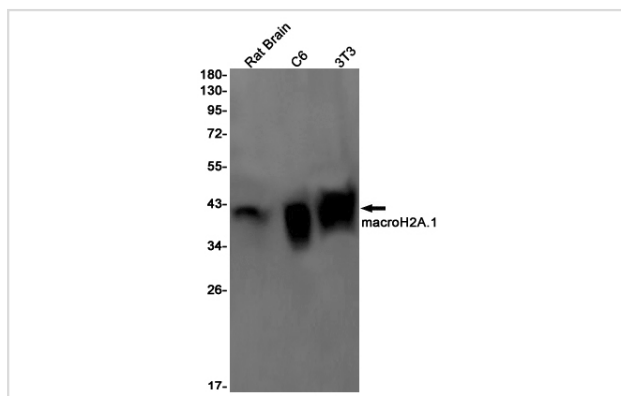
## Description

Product Name	Macro H2A.1 Rabbit mAb
Host Species	Recombinant Rabbit
Clonality	Monoclonal antibody
Clone No.	S04-8E5
Isotype	Rabbit IgG
Purification	Affinity Purified
Applications	WB IF
Species Reactivity	Human,Mouse,Rat
Immunogen Description	A synthetic peptide of human macroH2A.1
Conjugates	Unconjugated
Modification	Unmodification
Other Names	H2A.y; H2A/y; mH2A1; H2AF12M; MACROH2A1.1; macroH2A1.2
Accession No.	Swiss-Prot:O75367GeneID:9555
Uniprot	O75367
GeneID	9555
Calculated MW	Calculated MW: 40 kDa; Observed MW: 40 kDa
Concentration	0.3 mg/ml
Formulation	50mM Tris-Glycine(pH 7.4), 0.15M NaCl, 40% Glycerol, 0.01% Sodium azide and 0.05% BSA
Storage	Store at 4°C short term. Aliquot and store at -20°C long term. Avoid freeze/thaw cycles.

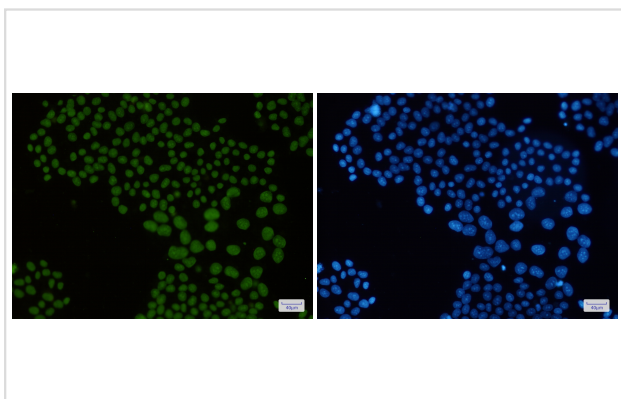
## Application Details

WB: 1/2000-1/10000; ICC/IF: 1/50

## Images



Western blot detection of macroH2A.1 in Rat Brain,C6,3T3 cell lysates using macroH2A.1 Rabbit mAb(1:1000 diluted).Predicted band size:40kDa.Observed band size:40kDa.



Immunofluorescence of macroH2A.1(green) in HeLa cells using macroH2A.1 Rabbit mAb at dilution 1/50, and DAPI(blue)

## Background

Swiss-Prot Acc.O75367.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. 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. 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:12718888, PubMed:16428466). Inhibits histone acetylation by EP300 and recruits class I HDACs, which induces a hypoacetylated state of chromatin (PubMed:16428466, PubMed:16107708).

Note: This product is for in vitro research use only