

## SATB1 Rabbit mAb

Catalog No: #52670

Package Size: #52670-1 50ul #52670-2 100ul

Orders: order@signalwayantibody.com

Support: tech@signalwayantibody.com

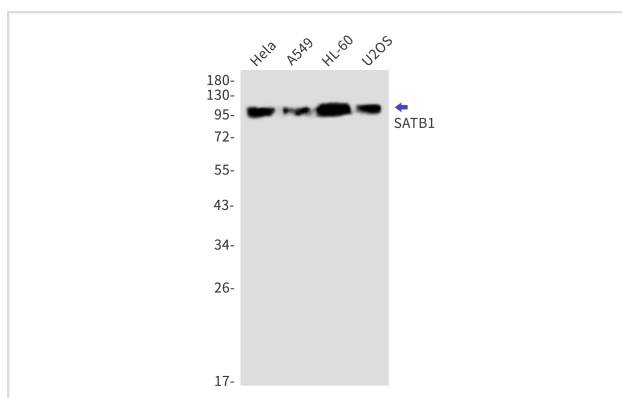
## Description

Product Name	SATB1 Rabbit mAb
Host Species	Recombinant Rabbit
Clonality	Monoclonal antibody
Clone No.	S03-5H7
Isotype	IgG
Purification	Affinity Purified
Applications	WB IHC
Species Reactivity	Human,Mouse,Rat
Immunogen Description	A synthetic peptide of human SATB1
Conjugates	Unconjugated
Modification	Unmodification
Other Names	Special AT-rich sequence-binding protein 1
Accession No.	Swiss-Prot:Q01826GeneID:6304
Uniprot	Q01826
GeneID	6304
Calculated MW	Calculated MW:86 kDa,Observed MW:100 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.

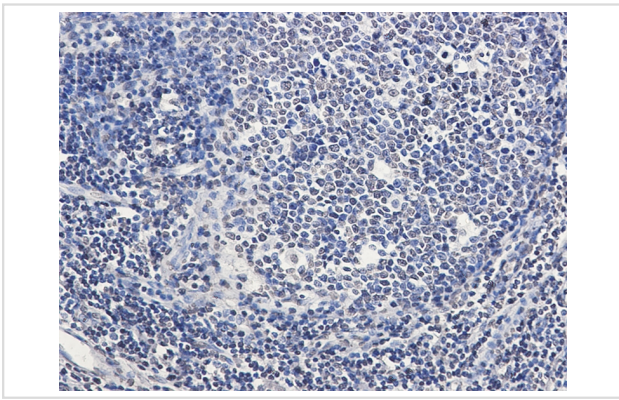
## Application Details

WB: 1/1000-1/5000 IHC: 1/20-1/50

## Images



Western blot detection of SATB1 in HeLa,A549,HL-60,U2OS cell lysates using SATB1 Rabbit mAb(1:1000 diluted).Predicted band size:86kDa.Observed band size:100kDa.



Immunohistochemistry of SATB1 in paraffin-embedded Human tonsil using SATB1 Rabbit mAb at dilution 1/50

## Background

Crucial silencing factor contributing to the initiation of X inactivation mediated by Xist RNA that occurs during embryogenesis and in lymphoma (By similarity). Binds to DNA at special AT-rich sequences, the consensus SATB1-binding sequence (CSBS), at nuclear matrix- or scaffold-associated regions. Thought to recognize the sugar-phosphate structure of double-stranded DNA. Transcriptional repressor controlling nuclear and viral gene expression in a phosphorylated and acetylated status-dependent manner, by binding to matrix attachment regions (MARs) of DNA and inducing a local chromatin-loop remodeling. Acts as a docking site for several chromatin remodeling enzymes (e.g. PML at the MHC-I locus) and also by recruiting corepressors (HDACs) or coactivators (HATs) directly to promoters and enhancers. Modulates genes that are essential in the maturation of the immune T-cell CD8SP from thymocytes. Required for the switching of fetal globin species, and beta- and gamma-globin genes regulation during erythroid differentiation. Plays a role in chromatin organization and nuclear architecture during apoptosis. Interacts with the unique region (UR) of cytomegalovirus (CMV). Alu-like motifs and SATB1-binding sites provide a unique chromatin context which seems preferentially targeted by the HIV-1 integration machinery. Moreover, HIV-1 Tat may overcome SATB1-mediated repression of IL2 and IL2RA (interleukin) in T-cells by binding to the same domain than HDAC1. Delineates specific epigenetic modifications at target gene loci, directly up-regulating metastasis-associated genes while down-regulating tumor-suppressor genes. Reprograms chromatin organization and the transcription profiles of breast tumors to promote growth and metastasis. Promotes neuronal differentiation of neural stem/progenitor cells in the adult subventricular zone, possibly by positively regulating the expression of NEUROD1 (By similarity).

Note: This product is for in vitro research use only