# SATB1 Rabbit mAb

Catalog No: #48697

Package Size: #48697-1 50ul #48697-2 100ul



Orders: order@signalwayantibody.com Support: tech@signalwayantibody.com

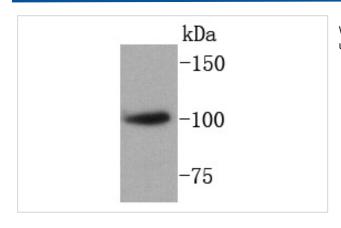
# Description

Product Name	SATB1 Rabbit mAb
Host Species	Recombinant Rabbit
Clonality	Monoclonal
Clone No.	SP05-03
Purification	ProA affinity purified
Applications	WB, ICC/IF, IHC, IP, FC
Species Reactivity	Hu, Ms, Rt
Immunogen Description	recombinant protein
Conjugates	Unconjugated
Other Names	DNA binding protein SATB1 antibody DNA-binding protein SATB1 antibody SATB homeobox 1 antibody
	SATB1 antibody SATB1_HUMAN antibody Special AT rich sequence binding protein 1 (binds to nuclear
	matrix/scaffold associating DNA) antibody Special AT rich sequence binding protein 1 antibody Special
	AT-rich sequence-binding protein 1 antibody
Accession No.	Swiss-Prot#:Q01826
Calculated MW	100 kDa
Formulation	1*TBS (pH7.4), 1%BSA, 40%Glycerol. Preservative: 0.05% Sodium Azide.
Storage	Store at -20°C

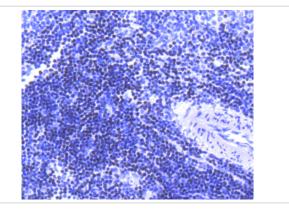
# **Application Details**

WB: 1:1,000IHC: 1:50-1:200 ICC: 1:50-1:200FC: 1:50-1:100

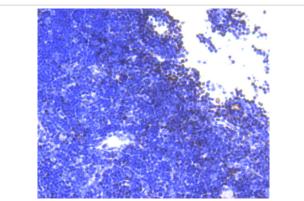
# **Images**



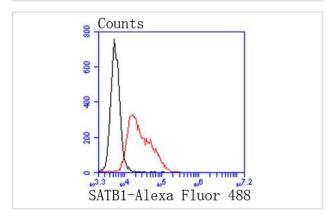
Western blot analysis of SATB1 on human thymus lysates using anti-SATB1 antibody at 1/1,000 dilution.



Immunohistochemical analysis of paraffin-embedded rat spleen tissue using anti-SATB1 antibody. Counter stained with hematoxylin.



Immunohistochemical analysis of paraffin-embedded mouse thymus tissue using anti-SATB1 antibody. Counter stained with hematoxylin.



Flow cytometric analysis of Jurkat cells with SATB1 antibody at 1/50 dilution (red) compared with an unlabelled control (cells without incubation with primary antibody; black). Alexa Fluor 488-conjugated goat anti rabbit IgG was used as the secondary antibody

#### Background

The homeoproteins CCAAT displacement protein (CDP) and special AT-rich sequence binding protein 1 (SATB1) are transcriptional repressors of many cellular genes, and they participate in cell development and cell type differentiation. SATB1 is expressed primarily in thymocytes, and, like CDP, it also contains a distinct homeobox DNA-binding domain that is essential for DNA binding. SATB1 and CDP interact through these homeodomains and synergistically function as mediators of gene expression. SATB1 contains an additional domain that has a higher affinity for DNA and specifically facilitates the direct association between SATB1 and the nuclear matrix attachment regions (MARs) of DNA. MARs are specific DNA sequences that bind to the nuclear matrix and form the base of chromosomal loops that organize the chromosomes and regulate DNA transcription and replication within the nucleus. The association of SATB1 with the core unwinding element within the base-unpairing region of MARs requires both the MAR and homeobox binding domains of SATB1.

#### References

Note: This product is for in vitro research use only and is not intended for use in humans or animals.