

### Datasheet for ABIN7118794

# anti-SATB1 antibody



#### Overview

Quantity:	100 μg
Target:	SATB1
Reactivity:	Human, Mouse, Rat
Host:	Rabbit
Clonality:	Polyclonal
Conjugate:	This SATB1 antibody is un-conjugated
Application:	Western Blotting (WB), ELISA, Immunoprecipitation (IP)

### **Product Details**

Immunogen:	SATB homeobox 1
Isotype:	IgG
Purification:	Immunogen affinity purified
Purity:	≥95 % as determined by SDS-PAGE

## **Target Details**

Target:	SATB1
Alternative Name:	SATB1 (SATB1 Products)
Background:	Synonyms: 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 tumorsuppressor genes. Reprograms chromatin organization and the transcription profiles of breast tumors to promote growth and metastasis.

Molecular Weight:	100 kDa
Gene ID:	6304
UniProt:	Q01826
Pathways:	Caspase Cascade in Apoptosis, Activated T Cell Proliferation

## **Application Details**

Application Notes:	WB: 1:500-1:2000, IP: 1:200-1:2000
Restrictions:	For Research Use only

#### Handling

Format:	Liquid
Buffer:	PBS with 0.02 % sodium azide and 50 % glycerol pH 7.3,
Preservative:	Sodium azide
Precaution of Use:	This product contains Sodium azide: a POISONOUS AND HAZARDOUS SUBSTANCE which should be handled by trained staff only.
Storage:	-20 °C

# Handling

Storage Comment:	-20°C for 12 months (Avoid repeated freeze / thaw cycles.)
Expiry Date:	12 months