

Datasheet for ABIN745615

anti-SATB1 antibody (pSer47) (Biotin)[Go to Product page](#)

Overview

Quantity:	100 µL
Target:	SATB1
Binding Specificity:	pSer47
Reactivity:	Human, Mouse
Host:	Rabbit
Clonality:	Polyclonal
Conjugate:	This SATB1 antibody is conjugated to Biotin
Application:	ELISA, Immunohistochemistry (Paraffin-embedded Sections) (IHC (p)), Immunohistochemistry (Frozen Sections) (IHC (fro))

Product Details

Immunogen:	KLH conjugated synthetic phosphopeptide derived from human SATB1 around the phosphorylation site of Ser47
Isotype:	IgG
Cross-Reactivity:	Human, Mouse
Predicted Reactivity:	Dog,Cow,Pig,Chicken,Rabbit
Purification:	Purified by Protein A.

Target Details

Target:	SATB1
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Target Details

Alternative Name: SATB1 ([SATB1 Products](#))

Background: Synonyms: DNA-binding protein SATB1, Special AT-rich sequence-binding protein 1, SATB1
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.

Gene ID: 6304

UniProt: [Q01826](#)

Pathways: [Caspase Cascade in Apoptosis, Activated T Cell Proliferation](#)

Application Details

Application Notes: IHC-P 1:200-400

IHC-F 1:100-500

Restrictions: For Research Use only

Handling

Format: Liquid

Handling

Concentration:	1 µg/µL
Buffer:	Aqueous buffered solution containing 0.01M TBS (pH 7.4) with 1 % BSA, 0.03 % Proclin300 and 50 % Glycerol.
Preservative:	ProClin
Precaution of Use:	This product contains ProClin: a POISONOUS AND HAZARDOUS SUBSTANCE, which should be handled by trained staff only.
Storage:	-20 °C
Storage Comment:	Store at -20°C for 12 months.
Expiry Date:	12 months