

Rabbit anti-Human, Mouse SATB1 Polyclonal Antibody | anti-SATB1 antibody

SATB1 Antibody

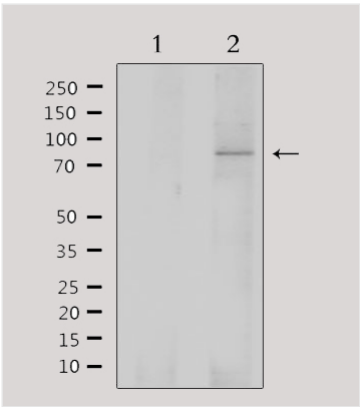
CATALOG # AAA327359	HOST Rabbit	REACTIVITY Human, Mouse	APPLICATIONS ELISA, Western Blot
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PRODUCT SYNONYMS

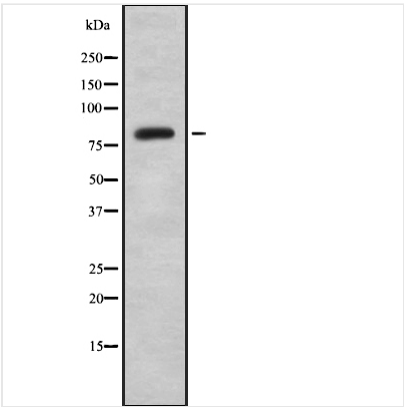
SATB1; Polyclonal Antibody; SATB1 Antibody; DNA binding protein SATB1; DNA-binding protein SATB1; SATB homeobox 1; SATB1_HUMAN; Special AT rich sequence binding protein 1 (binds to nuclear matrix/scaffold associating DNA); Special AT rich sequence binding protein 1; Special AT-rich sequence-binding protein 1; anti-SATB1 antibody

PRODUCT SPECIFICATIONS

Host	Rabbit
Reactivity	Human, Mouse
Clonality	Polyclonal
Isotype	IgG
Specificity	SATB1 antibody detects endogenous levels of total SATB1
Purity/Purification	The antiserum was purified by peptide affinity chromatography using SulfoLink Coupling Resin.
Form/Format	Liquid Phosphate buffered saline, pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol.
Concentration	1mg/ml (varies by lot)
Sequence Length	763
Applicable Applications for anti-SATB1 antibody	ELISA, WB (Western Blot)
Immunogen	A synthesized peptide derived from human SATB1
Subcellular Location	Nucleus Matrix. Nucleus > PML Body. Organized into a cage-like network anchoring loops of heterochromatin and tethering specialized DNA sequences. When sumoylated, localized in promyelocytic leukemia nuclear bodies.
Tissue Specificity	Expressed predominantly in thymus.
Predicted Cross Reactivity	Rabbit
Similarity	Rabbit (100%)
Conjugation	Unconjugated
Preparation and Storage	Store at -20 degree C. Stable for 12 months from date of receipt.



WB (Western Blot)
Western blot analysis of extracts from mouse brain, using SATB1 Antibody. Lane 1 was treated with the antigen-specific peptide.



WB (Western Blot)
Western blot analysis of SATB1 using Jurkat whole lysates.

ADDITIONAL INFORMATION

Related Product Information for anti-SATB1 antibody	Function: 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. Subunit Structure: Interacts with CUX1 (via DNA-binding domains); the interaction inhibits the attachment of both proteins to DNA (By similarity). Homodimer. Part of the nuclear protein complex gamma-globin promoter and enhancer binding factor (gamma-PE) composed at least of SATB1 and HOXB2. Interaction with CtBP1 when not acetylated stabilizes attachment to DNA and promotes transcription repression. Interacts with PCAF. Interacts with sumoylated PML, HDAC1 and HIV-1 Tat via the PDZ-like dimerization domain. Interacts also with DYNLT3 and POLR2J2. Binds to EP300. Post-translational Modifications: Sumoylated. Sumoylation promotes cleavage by caspases. Phosphorylated by PKC. Acetylated by PCAF. Phosphorylated form interacts with HDAC1, but unphosphorylated form interacts with PCAF. DNA binding properties are activated by phosphorylation and inactivated by acetylation. In opposition, gene expression is down-regulated by phosphorylation but up-regulated by acetylation. Cleaved at Asp-254 by caspase-3 and caspase-6 during T-cell apoptosis in thymus and during B-cell stimulation. The cleaved forms cannot dimerize and lose transcription regulation function because of impaired DNA and chromatin association. Similarity: Belongs to the CUT homeobox family.
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NCBI AND UNIPROT INFORMATION

NCBI GI #	196114999
NCBI GeneID	6304
NCBI Accession #	NP_001124482.1
NCBI GenBank Nucleotide #	NM_001131010.3
UniProt Accession #	Q01826; Q59EQ0; B3KXF1; C9JTR6

Molecular Weight	Observed: 85 kDa Predicted: 86 kDa
NCBI Official Full Name	DNA-binding protein SATB1 isoform 1
NCBI Official Synonym Full Names	SATB homeobox 1
NCBI Official Symbol	SATB1
NCBI Protein Information	DNA-binding protein SATB1
UniProt Protein Name	DNA-binding protein SATB1
UniProt Gene Name	SATB1

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.

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Online datasheet: <https://stage.aaabiotech.com/polyclonal/satb1-antibody-western-blot-elisa/327359>