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SATB1 Antibody (C-Terminus)
Rabbit Polyclonal Antibody
Catalog # ALS12391

Specification

SATB1 Antibody (C-Terminus) - Product Information

Application	**IF**
Primary Accession	Q01826
Reactivity	**Human, Mouse, Rat**
Host	**Rabbit**
Clonality	**Polyclonal**
Calculated MW	**86kDa KDa**

SATB1 Antibody (C-Terminus) - Additional Information

Gene ID 6304

Other Names
DNA-binding protein SATB1, Special AT-rich sequence-binding protein 1, SATB1

Reconstitution & Storage
Short term 4°C, long term aliquot and store at -20°C, avoid freeze thaw cycles. Store undiluted.

Precautions
SATB1 Antibody (C-Terminus) is for research use only and not for use in diagnostic or therapeutic procedures.

SATB1 Antibody (C-Terminus) - Protein Information

Name SATB1 (HGNC:10541)

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. Promotes neuronal differentiation of neural stem/progenitor cells in the adult subventricular zone, possibly by positively regulating the expression of NEUROD1 (By similarity).

Cellular Location
Nucleus matrix. Nucleus, PML body. Note=Organized into a cage-like network anchoring loops of heterochromatin and tethering specialized DNA sequences (PubMed:12692553). When sumoylated, localized in promyelocytic leukemia nuclear bodies (PML NBs) (PubMed:18408014)

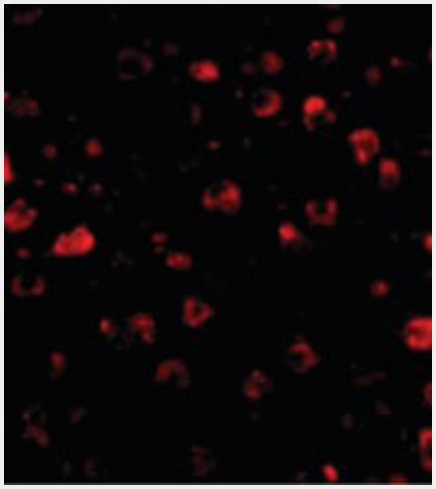
Tissue Location
Expressed predominantly in thymus.

SATB1 Antibody (C-Terminus) - Protocols

Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

SATB1 Antibody (C-Terminus) - Images



Immunofluorescence of SATB1 in Human Brain cells with SATB1 antibody at 20 ug/ml.

SATB1 Antibody (C-Terminus) - Background

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SATB1 Antibody (C-Terminus) - References

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