

Product datasheet for **TA306604**

SATB1 Rabbit Polyclonal Antibody

Product data:

Product Type:	Primary Antibodies
Applications:	IF, IHC, WB
Recommended Dilution:	WB: 1 - 2 ug/mL, ICC: 2.5 ug/mL, IF: 20 ug/mL
Reactivity:	Human, Mouse, Rat
Host:	Rabbit
Isotype:	IgG
Clonality:	Polyclonal
Immunogen:	SATB1 antibody was raised against a 18 amino acid peptide near the amino terminus of the human SATB1.
Formulation:	PBS containing 0.02% sodium azide.
Concentration:	1ug/ul
Purification:	Affinity chromatography purified via peptide column
Conjugation:	Unconjugated
Storage:	Store at -20°C as received.
Stability:	Stable for 12 months from date of receipt.
Gene Name:	SATB homeobox 1
Database Link:	NP_001124482 Entrez Gene 20230 Mouse Entrez Gene 316164 Rat Entrez Gene 6304 Human Q01826



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Background:

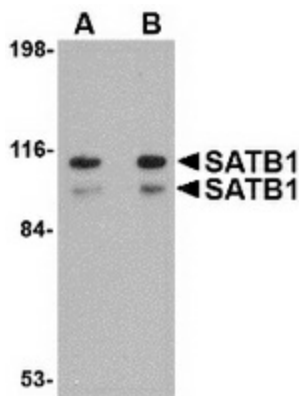
Human special AT-rich sequence-binding protein-1 (SATB1) is a nuclear matrix/scaffold-associated region DNA-binding protein, predominantly expressed in the thymus and pre-B cells. Like its homolog SATB2, SATB1 selectively binds double-stranded, special AT-rich DNA sequences in which one strand exclusively consists of well-mixed A, T, and C nucleotides. SATB1 contains a dimerization domain that shares similarity with the PDZ motif, identified as an indispensable element for high-affinity binding of SATB1 to DNA. SATB1 constitutes a functional nuclear architecture that has a 'cage-like' protein distribution surrounding heterochromatin and regulates gene expression through chromatin remodeling/HDAC (histone deacetylase complex) and transcription factors recruitment. SATB1 functions as a 'genome organizer' essential for proper T-cell development. Recent studies show that SATB1 is necessary for breast cancer cells to become metastatic, and when ectopically expressed in non-metastatic cells, can induce invasive activity in vivo. At least two isoforms of SATB1 are known to exist.

Synonyms:

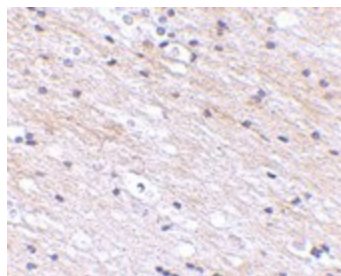
DNA-binding protein SATB1; SATB homeobox 1; scaffold-associating DNA's); special AT-rich sequence binding protein 1; special AT-rich sequence binding protein 1 (binds to nuclear matrix

Protein Families:

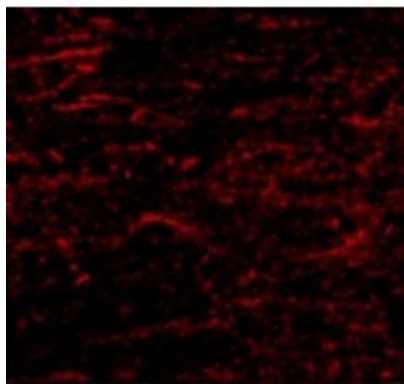
Druggable Genome, Transcription Factors

Product images:


Western blot analysis of SATB1 in SK-N-SH cell lysate with SATB1 antibody at (A) 1 and (B) 2 ug/ml.



Immunohistochemistry of SATB1 in human brain tissue with SATB1 antibody at 2.5 ug/ml.



Immunofluorescence of SATB1 (NT) in Human Brain cells with SATB1 (NT) antibody at 20 ug/mL.