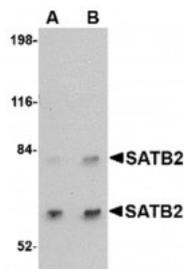
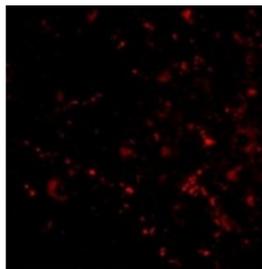


SATB2 Antibody

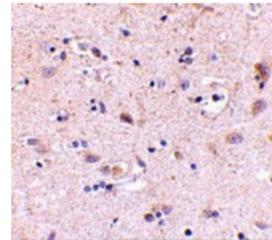
CATALOG NUMBER: 4629



Western blot analysis of SATB2 in A20 cell lysate with SATB2 antibody at (A) 2 and (B) 4 ug/mL.



Immunofluorescence of SATB2 in Human Brain cells with SATB2 antibody at 50 ug/mL.



Immunohistochemistry of SATB2 in human brain with SATB2 antibody at 5 ug/mL.

Specifications

SPECIES REACTIVITY: Human, Mouse, Rat

TESTED APPLICATIONS: ELISA, IF, IHC-P, WB

APPLICATIONS: SATB2 antibody can be used for detection of SATB2 by Western blot at 2 - 4 ug/mL. Antibody can also be used for immunohistochemistry starting at 5 ug/mL. For immunofluorescence start at 20 ug/mL.

Antibody validated: Western Blot in mouse samples; Immunohistochemistry in human samples and Immunofluorescence in human samples. All other applications and species not yet tested.

USER NOTE: Optimal dilutions for each application to be determined by the researcher.

POSITIVE CONTROL: 1) Cat. No. 1288 - A20 Cell Lysate
2) Cat. No. 10-301 - Human Brain Tissue Slide

SPECIFICITY: At least two isoforms of SATB2 are known to exist. This SATB2 antibody will not cross-react with SATB1.

IMMUNOGEN: SATB2 antibody was raised against a 14 amino acid synthetic peptide near the carboxy terminus of the human SATB2.

The immunogen is located within amino acids 570 - 620 of SATB2.

HOST SPECIES: Rabbit

Properties

PURIFICATION: SATB2 Antibody is affinity chromatography purified via peptide column.

PHYSICAL STATE: Liquid

BUFFER: SATB2 Antibody is supplied in PBS containing 0.02% sodium azide.

CONCENTRATION: 1 mg/mL

STORAGE CONDITIONS: SATB2 antibody can be stored at 4°C for three months and -20°C, stable for up to one year. As with all antibodies care should be taken to avoid repeated freeze thaw cycles. Antibodies should not be exposed to prolonged high temperatures.

CLONALITY: Polyclonal

ISOTYPE: IgG
CONJUGATE: Unconjugated

Additional Info

ALTERNATE NAMES: SATB2 Antibody: KIAA1034, DNA-binding protein SATB2, Special AT-rich sequence-binding protein 2
ACCESSION NO.: Q9UPW6
PROTEIN GI NO.: 13634020
OFFICIAL SYMBOL: SATB2
GENE ID: 23314

Background

BACKGROUND: SATB2 Antibody: Human special AT-rich sequence-binding protein-2 (SATB2) is a nuclear matrix/scaffold-associated region DNA-binding protein. Like its homolog SATB1, SATB2 selectively binds double-stranded, special AT-rich DNA sequences, but is expressed primarily in a subset of postmitotic, differentiating neurons in the neocortex. Mice deficient in SATB exhibit craniofacial abnormalities and defects in osteoblast differentiation and function. SATB2 also interacts with and enhances the activity of Runx2 and ATF4, two transcription factors that regulate osteoblast differentiation, indicating that SATB2 acts as a molecular node in a transcriptional network regulating skeletal development and osteoblast differentiation. Recent experiments have shown that SATB2 interacts with histone deacetylase 1 and metastasis-associated protein 2, two proteins that are involved in chromatin remodeling, suggesting that SATB2 may also be involved in mediating epigenetic influences during cortical development.

REFERENCES:

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- 2) Szemes M, Gyorgy A, Pawaletz C, et al. Isolation and characterization of SATB2, a novel AT-rich DNA binding protein expressed in development- and cell-specific manner in the rat brain. *Neurochem. Res.*2006; 31:237-46.
- 3) Dobрева G, Chahour M, Dautzenberg M, et al. SATB2 is a multifunctional determinant of craniofacial patterning and osteoblast differentiation. *Cell*2006; 125:971-86.
- 4) Gyorgy AB, Szemes M, de Jaun Romero C, et al. SATB2 interacts with chromatin-remodeling molecules in differentiating cortical neurons. *Eur. J. Neurosci.*2008; 27:865-73.

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March 31, 2018