

## SATB2 Antibody (Center)

Affinity Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP16464c

## **Specification**

# SATB2 Antibody (Center) - Product Information

Application WB,E
Primary Accession Q9UPW6

Other Accession <u>Q8VI24</u>, <u>NP 056080.1</u>

Reactivity
Predicted
Host
Clonality
Isotype
Calculated MW
Antigen Region

Human
Mouse
Rabbit
Polyclonal
Rabbit IgG
Alto-439

# SATB2 Antibody (Center) - Additional Information

**Gene ID 23314** 

#### **Other Names**

DNA-binding protein SATB2, Special AT-rich sequence-binding protein 2, SATB2, KIAA1034

#### Target/Specificity

This SATB2 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 410-439 amino acids from the Central region of human SATB2.

### **Dilution**

WB~~1:1000

#### **Format**

Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.

#### Storage

Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

## **Precautions**

SATB2 Antibody (Center) is for research use only and not for use in diagnostic or therapeutic procedures.

## SATB2 Antibody (Center) - Protein Information

Name SATB2

Synonyms KIAA1034



**Function** Binds to DNA, at nuclear matrix- or scaffold-associated regions. Thought to recognize the sugar-phosphate structure of double- stranded DNA. Transcription factor controlling nuclear gene expression, 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 and also by recruiting corepressors (HDACs) or coactivators (HATs) directly to promoters and enhancers. Required for the initiation of the upper-layer neurons (UL1) specific genetic program and for the inactivation of deep-layer neurons (DL) and UL2 specific genes, probably by modulating BCL11B expression. Repressor of Ctip2 and regulatory determinant of corticocortical connections in the developing cerebral cortex. May play an important role in palate formation. Acts as a molecular node in a transcriptional network regulating skeletal development and osteoblast differentiation.

#### **Cellular Location**

Nucleus matrix {ECO:0000255|PROSITE- ProRule:PRU00108, ECO:0000255|PROSITE-ProRule:PRU00374, ECO:0000269|PubMed:14701874}

#### **Tissue Location**

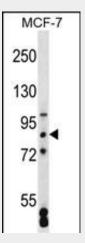
High expression in adult brain, moderate expression in fetal brain, and weak expression in adult liver, kidney, and spinal cord and in select brain regions, including amygdala, corpus callosum, caudate nucleus, and hippocampus.

## **SATB2 Antibody (Center) - Protocols**

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

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- <u>Immunoprecipitation</u>
- Flow Cytomety
- Cell Culture

# SATB2 Antibody (Center) - Images



SATB2 Antibody (Center) (Cat. #AP16464c) western blot analysis in MCF-7 cell line lysates (35ug/lane). This demonstrates the SATB2 antibody detected the SATB2 protein (arrow).

#### SATB2 Antibody (Center) - Background





This gene encodes a DNA binding protein that specifically binds nuclear matrix attachment regions. The encoded protein is involved in transcription regulation and chromatin remodeling. Defects in this gene are associated with isolated cleft palate and mental retardation. Alternate splicing results in multiple transcript variants that encode the same protein. [provided by RefSeq].

# **SATB2 Antibody (Center) - References**

McGovern, D.P., et al. Nat. Genet. 42(4):332-337(2010)
Carter, T.C., et al. Birth Defects Res. Part A Clin. Mol. Teratol. 88(2):84-93(2010)
Jugessur, A., et al. PLoS ONE 5 (7), E11493 (2010):
Rosenfeld, J.A., et al. PLoS ONE 4 (8), E6568 (2009):
Beaty, T.H., et al. Hum. Genet. 120(4):501-518(2006)