

Anti-SATB2 antibody



Description Unconjugated Rabbit polyclonal to SATB2

Model STJ190433

Host Rabbit

Reactivity Human, Mouse

Applications ELISA, WB

Immunogen Synthesized peptide derived from human SATB2 protein.

Immunogen Region 650-730aa

Gene ID 23314

Gene Symbol SATB2

Dilution range WB 1:500-2000 ELISA 1:5000-20000

Specificity SATB2 Polyclonal Antibody detects endogenous levels of protein.

Tissue Specificity 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.

Purification SATB2 antibody was affinity-purified from rabbit antiserum by affinity-

chromatography using epitope-specific immunogen.

Note For Research Use Only (RUO).

Protein Name DNA-binding protein SATB2 Special AT-rich sequence-binding protein 2

Molecular Weight 80 kDa

Clonality Polyclonal

Conjugation Unconjugated

Isotype IgG

Formulation Liquid form in PBS containing 50% glycerol, and 0.02% sodium azide.

Concentration 1 mg/ml

Storage Instruction Store at -20°C, and avoid repeat freeze-thaw cycles.

Database Links <u>HGNC:21637OMIM:119540</u>

Alternative Names DNA-binding protein SATB2 Special AT-rich sequence-binding protein 2

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 Localization Nucleus matrix

Post-translational Sumoylated by PIAS1. Sumoylation promotes nuclear localization, but

Modifications represses transcription factor activity.

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