## For Research Use Only

## SATB2 Polyclonal antibody

Catalog Number:30717-1-AP



**Purification Method:** 

WB: 1:1000-1:4000 IHC: 1:500-1:2000

Antigen affinity purification

Recommended Dilutions:

**Basic Information** 

Catalog Number:
30717-1-AP
BC098136
Concentration:
450 µg/ml
23314
Source:
Rabbit
Q9UPW6
Isotype:
IgG
GenBank Accession Number:
GeneID (NCBI):
23314
UNIPROT ID:
Q9UPW6
Full Name:
SATB homeobox 2

Immunogen Catalog Number: Calculated MW:
AG33523 733 aa, 83 kDa
Observed MW:

90 kDa

**Applications** 

Tested Applications: WB, IHC, ELISA Species Specificity: human, mouse

Note-IHC: suggested antigen retrieval with TE buffer pH 9.0; (\*) Alternatively, antigen retrieval may be performed with citrate buffer pH 6.0 Positive Controls:

WB: HEK-293 cells, mouse brain tissue IHC: human colon cancer tissue.

## **Background Information**

SATB2, also named as KIAA1034, belongs to the CUT homeobox family. SATB2 binds to DNA at nuclear matrix- or scaffold-associated regions. STAB2 recognizes the sugar-phosphate structure of double-stranded DNA. SATB2 is a transcription factor controlling nuclear gene expression, by binding to matrix attachment regions (MARs) of DNA and inducing a local chromatin-loop remodeling. SATB2 acts as a docking site for several chromatin remodeling enzymes and also by recruiting corepressors (HDACs) or coactivators (HATs) directly to promoters and enhancers. It is 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. It is a repressor of Ctip2 and regulatory determinant of corticocortical connections in the developing cerebral cortex. SATB2 may play an important role in palate formation. SATB2 acts as a molecular node in a transcriptional network regulating skeletal development and osteoblast differentiation.

Storage

Storage:

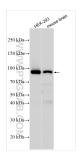
Store at -20°C. Stable for one year after shipment.

Storage Buffer:

PBS with 0.02% sodium azide and 50% glycerol, pH7.3  $\,$ 

Aliquoting is unnecessary for -20°C storage

## Selected Validation Data



Various lysates were subjected to SDS PAGE followed by western blot with 30717-1-AP (SATB2 antibody) at dilution of 1:2000 incubated at room temperature for 1.5 hours.



Immunohistochemical analysis of paraffinembedded human colon cancer tissue slide using 30717-1-AP (SATB2 antibody) at dilution of 1:1000 (under 20x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).