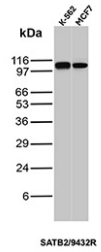
SATB2 Transcription Factor Antibody [clone SATB2/9432R] (V5896)

Catalog No.	Formulation	Size
V5896-100UG	0.2 mg/ml in 1X PBS with 0.05% BSA, 0.05% sodium azide	100 ug
V5896-20UG	0.2 mg/ml in 1X PBS with 0.05% BSA, 0.05% sodium azide	20 ug
V5896SAF-100UG	1 mg/ml in 1X PBS; BSA free, sodium azide free	100 ug

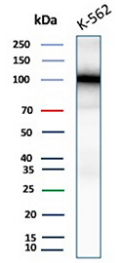
Recombinant RABBIT MONOCLONAL

Bulk quote request

Species Reactivity	Human
Format	Purified
Host	Rabbit
Clonality	Recombinant Rabbit Monoclonal
Isotype	Rabbit IgG, kappa
Clone Name	SATB2/9432R
UniProt	Q9UPW6
Localization	Nucleus
Applications	Immunohistochemistry (FFPE) : 1-2ug/ml Western Blot : 2-4ug/ml
Limitations	This SATB2 Transcription Factor antibody is available for research use only.



Western blot analysis of human K562 and MCF7 cell lysates using recombinant SATB2 Transcription Factor antibody (clone SATB2/9432R). A single band is detected at approximately 100 kDa, which is slightly higher than the predicted molecular weight of SATB2 (~83 kDa), consistent with post-translational modification and known aberrant migration of chromatin-associated transcription factors.



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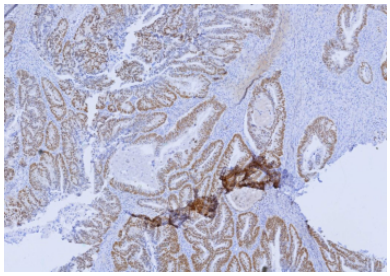

Immunohistochemistry analysis of SATB2 in human colon carcinoma. Formalin-fixed, paraffin-embedded human colon carcinoma tissue shows strong nuclear brown chromogenic staining in tumor epithelial cells using recombinant SATB2 Transcription Factor antibody (clone SATB2/9432R), consistent with nuclear localization of the SATB2 transcription factor in colorectal carcinoma cells. Staining of formalin-fixed tissues requires heating tissue sections in 10mM Tris with 1mM EDTA, pH 9.0, for 45 min at 95oC followed by cooling at RT for 20 minutes.

Description

SATB2 Transcription Factor Antibody recognizes Special AT-rich sequence-binding protein 2, a nuclear DNA-binding protein that functions as a global chromatin organizer and transcriptional regulator. SATB2 is widely known as a transcription factor involved in higher-order chromatin remodeling, where it regulates gene expression by tethering specialized DNA sequences to a chromatin network within the nucleus. SATB2 Transcription Factor Antibody is commonly used in research settings to study nuclear transcriptional regulation, chromatin organization, and lineage-specific gene expression programs in epithelial and neuronal tissues. The SATB2 protein is predominantly localized to the nucleus, consistent with its role in transcriptional control and genome architecture.

SATB2 is encoded by the SATB2 gene and is highly expressed in specific cell populations, including colorectal epithelial cells, osteoblasts, and subsets of neuronal cells during development. In adult tissues, SATB2 expression is most prominent in the lower gastrointestinal tract, particularly in colonic epithelium, making it a well-established marker of colorectal lineage. SATB2 Transcription Factor Antibody therefore plays an important role in studies focused on intestinal differentiation, epithelial identity, and tissue-specific transcriptional regulation. Clone SATB2/9432R is designed to recognize SATB2 protein and supports investigation of its nuclear expression patterns in relevant experimental models.

In cancer research, SATB2 has gained significant attention due to its diagnostic and biological relevance in colorectal cancer and related malignancies. SATB2 expression is frequently retained in tumors of colorectal origin and is used extensively as a lineage-associated marker in translational and pathology-oriented research studies. Beyond its diagnostic utility, SATB2 contributes to transcriptional programs that influence cell differentiation, proliferation, and tumor behavior. SATB2 Transcription Factor Antibody enables detailed examination of SATB2-positive nuclei, supporting research into tumor classification, molecular pathology, and transcription factor-driven oncogenic processes. Clone SATB2/9432R may be used to assess SATB2 expression in these contexts without implying clinical validation.

Outside of oncology, SATB2 also plays a critical role in developmental biology, particularly in craniofacial development, neuronal differentiation, and cortical patterning. Its function as a chromatin regulator places SATB2 at the intersection of epigenetic control and transcriptional specificity. SATB2 Transcription Factor Antibody provides a valuable tool for investigating how chromatin organization and transcription factor activity shape cell fate decisions, tissue development, and disease-associated transcriptional changes across a range of biological research applications.

Application Notes

Optimal dilution of the SATB2 Transcription Factor antibody should be determined by the researcher.

Immunogen

A recombinant fragment (around amino acids 1-200) of human SATB2 (exact sequence is proprietary) was used as the immunogen for the recombinant SATB2 Transcription Factor antibody.

Storage

SATB2 Transcription Factor antibody with sodium azide - store at 2 to 8oC; antibody without sodium azide - store at -20 to -80oC.