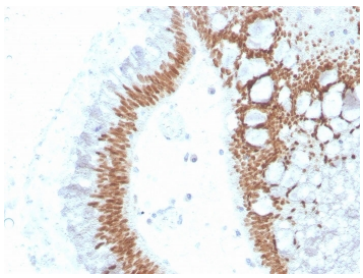
SATB2 Antibody / Colorectal and Lineage Marker [clone SATB2/4374R] (V8660)

Catalog No.	Formulation	Size
V8660-100UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced) and 0.05% sodium azide	100 ug
V8660-20UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced) and 0.05% sodium azide	20 ug
V8660SAF-100UG	1 mg/ml in 1X PBS; BSA free, sodium azide free	100 ug

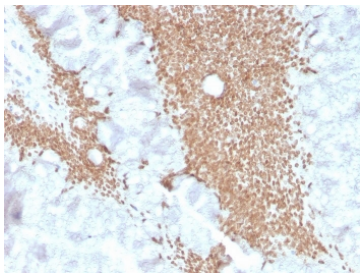
Recombinant RABBIT MONOCLONAL

Bulk quote request

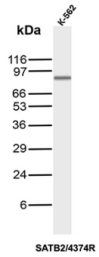
Availability	1-3 business days
Species Reactivity	Human
Format	Purified
Host	Rabbit
Clonality	Recombinant Rabbit Monoclonal
Isotype	Rabbit IgG
Clone Name	SATB2/4374R
Purity	Protein A affinity chromatography
UniProt	Q9UPW6
Localization	Nuclear
Applications	Immunohistochemistry (FFPE) : 1-2ug/ml for 30 minutes at RT Western Blot : 2-4ug/ml
Limitations	This SATB2 Antibody / Colorectal and Lineage Marker is available for research use only.



SATB2 Antibody Colon Carcinoma IHC. Immunohistochemistry analysis of FFPE human colon carcinoma tissue stained with recombinant rabbit monoclonal clone SATB2/4374R. Tumor epithelial cells display strong nuclear HRP-DAB brown staining consistent with expression of Special AT-rich sequence-binding protein 2 / SATB2, a lineage-associated chromatin regulator widely studied in colorectal differentiation and tumor classification pathways. Adjacent stromal tissue shows minimal background staining. HIER: boil tissue sections in pH 9 10mM Tris with 1mM EDTA for 20 min and allow to cool before testing.



SATB2 Antibody Human Colon Adenocarcinoma IHC. Immunohistochemistry analysis of FFPE human colon carcinoma tissue stained with recombinant rabbit monoclonal clone SATB2/4374R. Dense nuclear HRP-DAB brown staining is observed throughout malignant glandular epithelial cells, consistent with expression of Special AT-rich sequence-binding protein 2 / SATB2, a colorectal lineage-associated transcriptional regulator involved in chromatin organization and epithelial differentiation pathways. Non-neoplastic stromal elements display comparatively limited background staining. HIER: boil tissue sections in pH 9 10mM Tris with 1mM EDTA for 20 min and allow to cool before testing.



SATB2 Antibody Human K562 Cell Line WB. Western blot analysis of human K562 cell lysate using recombinant rabbit monoclonal SATB2 antibody clone SATB2/4374R. A prominent band is detected at approximately 85 kDa, consistent with the expected molecular weight of Special AT-rich sequence-binding protein 2 / SATB2, a nuclear chromatin organizer involved in colorectal lineage specification and regulation of differentiation-associated transcriptional programs.

Description

Special AT-rich sequence-binding protein 2 (SATB2) is a nuclear matrix-associated transcription factor involved in chromatin remodeling, epigenetic regulation, and lineage-specific gene expression. SATB2 Antibody / Colorectal and Lineage Marker is useful for studying colorectal epithelial differentiation, developmental transcriptional regulation, and lineage-associated tumor pathology. SATB2 antibody, also referred to as Special AT-rich sequence-binding protein 2 antibody and SATB2 colorectal marker antibody in the literature, recognizes a DNA-binding protein that functions as a chromatin organizer regulating higher-order transcriptional programs.

SATB2 is predominantly localized within the nucleus where it binds matrix attachment regions and coordinates chromatin looping, transcription factor recruitment, and epigenetic signaling pathways. The protein plays important roles in osteoblast differentiation, craniofacial development, neuronal specification, and maintenance of epithelial lineage-associated gene expression programs. In normal tissues, SATB2 expression is strongly associated with glandular epithelial populations of the lower gastrointestinal tract, particularly colorectal epithelium, making it an important marker in surgical pathology and tumor classification studies.

Because SATB2 demonstrates characteristic nuclear expression in colorectal epithelial cells, this target has become highly relevant in diagnostic pathology research focused on colorectal adenocarcinoma and metastatic tumor lineage determination. SATB2 immunohistochemistry is commonly used to support identification of colorectal origin in metastatic carcinomas and to distinguish colorectal tumors from morphologically similar malignancies arising in other tissue sites. Expression has also been studied in osteogenic tumors, appendiceal neoplasms, and selected epithelial malignancies associated with gastrointestinal differentiation pathways.

Beyond pathology applications, SATB2 functions as an important regulator of transcriptional architecture and developmental gene expression. Through interaction with chromatin remodeling complexes and transcriptional regulatory proteins, SATB2 contributes to cellular differentiation programs, nuclear organization, and maintenance of lineage-restricted transcriptional states. Dysregulation of SATB2-associated pathways has been linked to altered differentiation phenotypes, developmental abnormalities, and tumor progression mechanisms involving epigenetic control systems.

Immunohistochemistry studies commonly demonstrate strong nuclear staining patterns in colorectal epithelial and colorectal carcinoma tissues, while western blot analysis identifies the expected SATB2 protein band in human cell lysates. A recombinant rabbit monoclonal clone SATB2/4374R antibody can be used for immunohistochemistry and western blot applications examining colorectal lineage biology, chromatin organization, and developmental transcription pathways. Because SATB2 functions as both a lineage-associated marker and chromatin regulatory protein, this target

remains highly relevant for studies focused on tumor classification, epithelial differentiation, and epigenetic transcriptional regulation mechanisms.

Researchers studying tumor lineage determination, colorectal carcinoma markers, and epithelial differentiation pathways may also be interested in our broader Cancer Antibodies collection featuring targets involved in tumor classification, oncogenic signaling, and diagnostic pathology research.

Application Notes

Optimal dilution of the SATB2 Antibody / Colorectal and Lineage Marker should be determined by the researcher.

Immunogen

A portion of amino acids 200-300 from the human protein was used as the immunogen for the recombinant SATB2 antibody.

Storage

Store the recombinant SATB2 antibody at 2-8oC (with azide) or aliquot and store at -20oC or colder (without azide).

Alternate Names

SATB2 colorectal marker antibody, Special AT-rich sequence-binding protein 2 antibody, SATB2 lineage marker antibody, Nuclear transcription factor antibody, Chromatin organization antibody