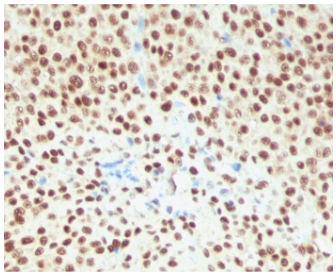
HMG-box Transcription Factor/SOX10 Antibody [clone SBX10-2R] (V3777)

Catalog No.	Formulation	Size
V3777-100UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced) and 0.05% sodium azide	100 ug
V3777-20UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced) and 0.05% sodium azide	20 ug
V3777SAF-100UG	1 mg/ml in 1X PBS; BSA free, sodium azide free	100 ug
V3777IHC-7ML	Prediluted in 1X PBS with 0.1 mg/ml BSA (US sourced) and 0.05% sodium azide; *For IHC use only*	7 ml

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, kappa
Clone Name	SBX10-2R
Purity	Protein A affinity chromatography
UniProt	P56693
Localization	Nuclear
Applications	Immunohistochemistry (FFPE) : 1-2ug/ml for 30 min at RT Prediluted IHC Only Format : incubate for 30 min at RT (1)
Limitations	This HMG-box Transcription Factor/SOX10 antibody is available for research use only.



IHC staining of FFPE human melanoma tissue with HMG-box Transcription Factor/SOX10 antibody (clone SBX10-2R). Required HIER: boil sections in pH 9 10mM Tris with 1mM EDTA for 10-20 minutes, followed by cooling at RT for 20 minutes, prior to staining.

Description

HMG-box Transcription Factor Antibody recognizes SOX10, a member of the SOX family of transcription factors characterized by a conserved high mobility group box DNA-binding domain. The SOX10 gene encodes a nuclear protein that regulates transcriptional programs central to neural crest formation and differentiation. SOX10 binds specific DNA sequences and facilitates transcriptional activation of genes required for melanocyte development, peripheral glial cell maturation, and enteric nervous system formation. During embryonic development, SOX10 maintains neural crest cell identity and survival while promoting lineage commitment toward melanocytic and Schwann cell fates. It regulates key downstream targets such as MITF and myelin-associated genes, integrating signaling inputs from Wnt, Notch, and neuregulin pathways. In adult tissues, SOX10 expression is largely confined to melanocytes in the epidermis and hair follicles and to Schwann cells within peripheral nerves, resulting in distinct nuclear staining patterns detectable with SOX10 antibody. Because of its lineage specificity, SOX10 antibody is widely used to identify melanocytic and peripheral nerve-derived cell populations in research settings. In oncology studies, SOX10 is strongly expressed in melanoma and certain peripheral nerve sheath tumors, where nuclear staining supports classification and lineage assessment. Expression has also been described in subsets of breast carcinoma and salivary gland neoplasms exhibiting basal-like differentiation. Abnormal SOX10 expression may contribute to tumor cell plasticity and progression in melanoma. HMG-box Transcription Factor Antibody directed against SOX10 is suitable for detecting nuclear SOX10 expression in immunohistochemistry and related laboratory assays, supporting developmental biology and cancer research applications.

Application Notes

Titering of the HMG-box Transcription Factor/SOX10 antibody may be required for optimal performance.

1. The prediluted format is supplied in a dropper bottle and is optimized for use in IHC. After epitope retrieval step (if required), drip mAb solution onto the tissue section and incubate at RT for 30 min.

Immunogen

Amino acids 115-269 of the human protein were used as the immunogen for the HMG-box Transcription Factor/SOX10 antibody.

Storage

Store the HMG-box Transcription Factor/SOX10 antibody at 2-8oC (with azide) or aliquot and store at -20oC or colder (without azide).

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