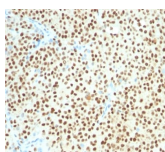


# SOX10 Monoclonal Mouse Antibody (SOX10/991 + SOX10/1074)



## Product Description

Recognizes a protein of ~55 kDa, identified as SOX10. This MAb is highly specific and does not cross-react with other members of the SOX-family. SOX genes comprise a family of genes that are related to the mammalian sex-determining gene SRY. These genes similarly contain sequences that encode for the HMG-box domain, which is responsible for the sequence-specific DNA-binding activity. SOX-10 is a sensitive marker of melanoma, including conventional, spindled, and desmoplastic subtypes. It is expressed by metastatic melanomas and nodal capsular nevus in sentinel lymph nodes, but not by other lymph node components such as dendritic cells, which usually express S100 protein. Commonly used melanoma markers, such as anti-HMB-45 and anti-Melan-A, are poorly expressed in desmoplastic melanomas while SOX-10 is moderately to strongly expressed in desmoplastic melanomas. SOX-10 is considered as a very reliable marker for recognizing residual desmoplastic melanomas. In normal tissues, it is expressed in Schwann cells, melanocytes, and myoepithelial cells of salivary, bronchial and mammary glands. SOX-10 expression is also observed in mast cells.

Primary antibodies are available purified, or with a selection of fluorescent CF® dyes and other labels. CF® dyes offer exceptional brightness and photostability. See the [CF® Dye Brochure](#) for more information. Note: Conjugates of blue fluorescent dyes like CF®405S and CF®405M are not recommended for detecting low abundance targets, because blue dyes have lower fluorescence and can give higher non-specific background than other dye colors.

**Stock status:** Because Biotium offers a large number of antibody and conjugation options, primary antibody conjugates may be made to order. Typical lead times are up to one week for CF® dye and biotin conjugates, and up to 2-3 weeks for fluorescent protein and enzyme conjugates. Please email [order@biotium.com](mailto:order@biotium.com) to inquire about stock status and lead times before placing your order.

**Catalog number key for antibody number 1074, Anti-SOX10 (SOX10/991 SOX10/1074)**

## Product attributes

Antibody number	#1074
Antibody reactivity (target)	SOX10
Antibody type	Primary
Host species	Mouse
Clonality	Monoclonal
Clone	SOX10/991 SOX10/1074
Isotype	IgG2b, kappa
Molecular weight	49-58 kDa
Synonyms	DOM; PCWH; SOX10; SRY (sex determining region Y) box 10; SRY box containing gene 10; SRY related HMG box gene 10; Waardenburg syndrome type 2E (WS2E); WS4; Waardenburg syndrome type 4C (WS4C)
Human gene symbol	SOX10
Entrez gene ID	6663
SwissProt	P56693
Unigene	376984
Immunogen	Recombinant fragment (aa 115-269) of human SOX10 protein with hexa-histidine tag
Verified antibody applications	IHC (FFPE) (verified), WB (verified)
Antibody target cellular localization	Nucleus
Species reactivity	Human
Antibody application notes	Higher concentration may be required for direct detection using primary antibody conjugates than for indirect detection with secondary antibody. Immunofluorescence: 1-2 ug/mL. Immunohistology formalin-fixed 0.5-1 ug/mL. Staining of formalin-fixed tissues requires boiling tissue sections in 10 mM citrate buffer, pH 6.0, for 10-20 min followed by cooling at RT for 20 minutes. Flow Cytometry 0.5-1 ug/million cells/0.1 mL. Western blotting 0.5-1.0 ug/mL. Optimal dilution for a specific application should be determined by user
Positive control	HepG2 cells. Melanomas, breast carcinomas, gliomas.
Shipping condition	Room temperature
Storage Conditions	Store at 2 to 8 °C. Protect fluorescent conjugates from light. Note: store BSA-free antibodies at -10 to -35 °C
Shelf life	Guaranteed for at least 24 months from date of receipt when stored as recommended
Regulatory status	For research use only (RUO)
Antibody/conjugate formulation	Conjugates: 0.1 mg/mL in PBS/0.1% BSA/0.05% azide, HRP conjugates: 0.1 mg/mL in PBS/0.05% BSA, Purified: 0.2 mg/mL in PBS/0.05% BSA/0.05% azide, Purified, BSA-free: 1 mg/mL in PBS without azide
Validated in protein array	Monospecific
Antibody research areas	Cancer, Developmental biology, Transcription factors
Product origin	Product may contain either bovine serum albumin (BSA) from bovine serum (Bos taurus), or recombinant BSA produced in Chinese hamster ovary cells. Inquire for the specific lot.
Tumor expression	Melanoma

Antibody # prefix	Conjugation	Ex/Em (nm)	Laser line	Detection channel	Dye Features
BNC04	CF®405S	404/431	405	DAPI (microscopy), AF405	<a href="#">CF®405S Features</a>
BNC88	CF®488A	490/515	488	GFP, FITC	<a href="#">CF®488A Features</a>
BNC68	CF®568	562/583	532, 561	RFP, TRITC	<a href="#">CF®568 Features</a>
BNC94	CF®594	593/614	561	Texas Red®	<a href="#">CF®594 Features</a>
BNC40	CF®640R	642/662	633-640	Cy®5	<a href="#">CF®640R Features</a>
BNC47	CF®647	650/665	633-640	Cy®5	<a href="#">CF®647 Features</a>
BNC74	CF®740	742/767	633-685	775/50	<a href="#">CF®740 Features</a>
BNCB	Biotin	N/A	N/A	N/A	
BNUB	Purified	N/A	N/A	N/A	
BNUM	Purified, BSA-free	N/A	N/A	N/A	

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