

# SOX2 Monoclonal Mouse Antibody (SOX2/1791)



## **Product Description**

SOX2 is a member of the SRY-related HMG-box (SOX) family of transcription factors involved in the regulation of embryonic development and in the determination of cell fate. At present, 30 Sox genes have been identified. SOX2 is required for stem cell maintenance in the central nervous system, and it also regulates gene expression in the stomach. SOX2 is necessary for regulating multiple transcription factors that affect Oct 3/4 expression. An essential function of SOX2 is to stabilize embryonic stem cells in a pluripotent state by maintaining the requisite level of Oct 3/4 expression.

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 <u>CF® Dye Brochure</u> 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 <u>order@biotium.com</u> to inquire about stock status and lead times before placing your order.

Catalog number key for antibody number 1791, Anti-SOX2 (SOX2/1791)

#### Call us : <u>800-304-5357</u>

#### Email: techsupport@biotium.com

### Product attributes

Product attributes	
Antibody number	#1791
Antibody reactivity (target)	SOX2
Antibody type	Primary
Host species	Mouse
Clonality	Monoclonal
Clone	SOX2/1791
Isotype	IgG2b, kappa
Molecular weight	34 kDa
Synonyms	ANOP3; Delta EF2a; MCOPS3 (Microphthalmia Syndromic type 3); SOX-2; SRY (sex determining region Y) box 2; SRY related HMG box 2; Transcription factor SOX-2; ysb
Human gene symbol	SOX2
Entrez gene ID	6657
SwissProt	P48431
Unigene	518438
Immunogen	Recombinant human SOX2 protein fragment (aa176-305) (exact sequence is proprietary)
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, ELISA: 2-4 ug/mL for coating order Ab without BSA, Immunohistology (formalin): 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 min, Flow Cytometry 0.5-1 ug/mIllion cells/0.1 mL, Western blotting 0.5-1 ug/mL, Optimal dilution for a specific application should be determined by user
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Antibody # prefix Conjugation Ex/Em (nm) Laser line Detection channel **Dye Features** BNC04 CF®405S 404/431 405 DAPI (microscopy), CF®405S Features AF405 BNC88 CF®488A 490/515 488 GFP, FITC CF®488A Features BNC68 CF®568 562/583 532, 561 RFP, TRITC CF®568 Features BNC94 CF®594 593/614 561 Texas Red® CF®594 Features BNC40 CF®640R 642/662 633-640 Cy®5 CF®640R Features BNC47 CF®647 650/665 633-640 Cy®5 CF®647 Features BNC74 CF®740 742/767 633-685 775/50 CF®740 Features BNCB Biotin N/A N/A N/A BNUB Purified N/A N/A N/A Purified, N/A N/A N/A BNUM **BSA-free** 

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