

## SOX2 (Embryonic Stem Cell Marker) Antibody

Mouse Monoclonal Antibody [Clone SOX2/1792]

Catalog No	Format	Size
6657-MSM2-P0	Purified Ab with BSA and Azide at 200ug/ml	20 ug
6657-MSM2-P1	Purified Ab with BSA and Azide at 200ug/ml	100 ug
6657-MSM2-P1ABX	Purified Ab WITHOUT BSA and Azide at 1.0mg/ml	100 ug

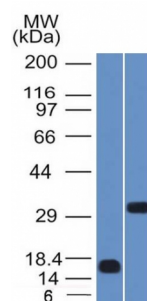
Applications	Tested Dillution	Note
Immunohistochemistry (IHC)	1-2ug/ml	30 min at RT. Staining of formalin-fixed tissues requires heating tissue sections in 10mM Tris with 1mM EDTA, pH 9.0, for 45 min at 95°C followed by cooling at RT for 20 minutes
Western Blot (WB)	2-4ug/ml	

### Product Details

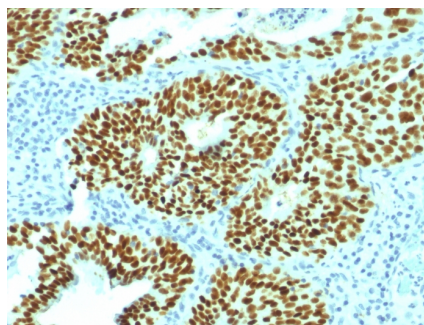
<b>Clone</b>	SOX2/1792
<b>Gene Name</b>	SOX2
<b>Immunogen</b>	Recombinant fragment (within aa176-305) of human SOX2 protein (exact sequence is proprietary)
<b>Host</b>	Mouse
<b>Clonality</b>	Monoclonal
<b>Isotype / Light Chain</b>	IgG2b / Kappa
<b>Mol. Weight of Antigen</b>	34kDa
<b>Cellular Localization</b>	Cytoplasm, Nucleus, Nucleus speckle
<b>Species Reactivity</b>	Human, Mouse
<b>Positive Control</b>	MCF-7 cells. Lung or Cervical carcinoma.

\*Optimal dilution for a specific application should be determined.

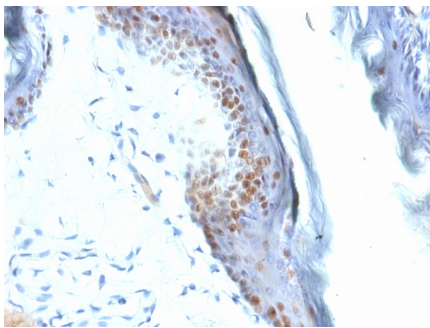
### Product Images for SOX2 (Embryonic Stem Cell Marker) Antibody



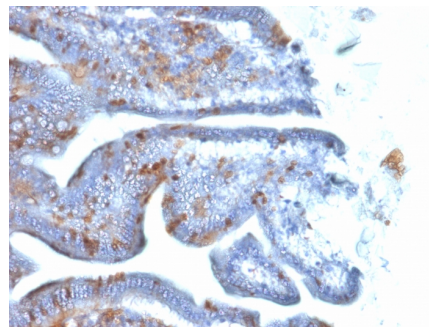
Western Blot of Recombinant SOX2 protein fragment and NCCIT cell lysate using SOX2 Mouse Monoclonal Antibody (SOX2/1792).



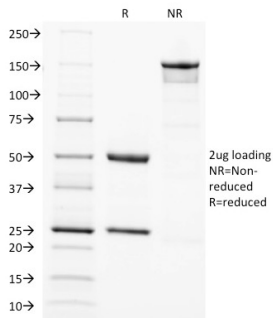
Formalin-fixed, paraffin-embedded human Cervical Carcinoma stained with SOX2 Mouse Monoclonal Antibody (SOX2/1792).



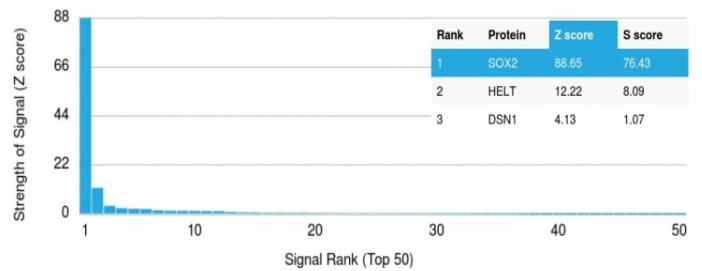
Formalin-fixed, paraffin-embedded Mouse Stomach stained with SOX2 Mouse Monoclonal Antibody (SOX2/1792).



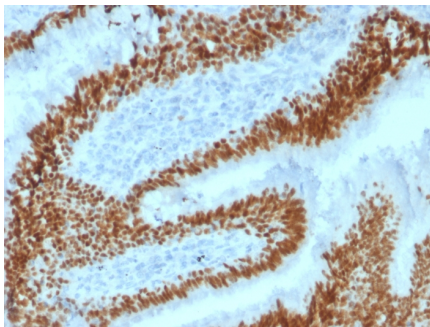
Formalin-fixed, paraffin-embedded Mouse Intestine stained with SOX2 Mouse Monoclonal Antibody (SOX2/1792).



SDS-PAGE Analysis Purified SOX2 Mouse Monoclonal Antibody (SOX2/1792). Confirmation of Integrity and Purity of Antibody.



Analysis of Protein Array containing more than 19,000 full-length human proteins using SOX2 Mouse Monoclonal Antibody (SOX2/1792) Z- and S- Score: The Z-score represents the strength of a signal that a monoclonal antibody (MAB) (in combination with a fluorescently-tagged anti-IgG secondary antibody) produces when binding to a particular protein on the HuProt™ array. Z-scores are described in units of standard deviations (SD's) above the mean value of all signals generated on that array. If targets on HuProt™ are arranged in descending order of the Z-score, the S-score is the difference (also in units of SD's) between the Z-score. S-score therefore represents the relative target specificity of a MAB to its intended target. A MAB is considered to be specific to its intended target, if the MAB has an S-score of at least 2.5. For example, if a MAB binds to protein X with a Z-score of 43 and to protein Y with a Z-score of 14, then the S-score for the binding of that MAB to protein X is equal to 29.



Formalin-fixed, paraffin-embedded human Lung Carcinoma stained with SOX2 Mouse Monoclonal Antibody (SOX2/1792).

**Specificity & Comments**

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. Reportedly, SOX2 is associated with aggressive phenotypes of breast, head and neck, gastric, colorectal, bladder, and small cell lung cancers. However, SOX2 is expressed in a high percentage of lung squamous cell carcinomas and has been shown to be an independent favorable prognostic marker.

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**Limitations and Warranty**

This antibody is available for research use only and is not approved for use in diagnosis. There are no warranties, expressed or implied, which extend beyond this description. Company is not liable for any personal injury or economic loss resulting from this product.

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**Supplied As**

200ug/ml of Ab Purified from Bioreactor Concentrate by Protein A/G. Prepared in 10mM PBS with 0.05% BSA & 0.05% azide. Also available WITHOUT BSA & azide at 1.0mg/ml.

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**Storage and Stability**

Antibody with azide - store at 2 to 8°C. Antibody without azide - store at -20 to -80°C. Antibody is stable for 24 months. Non-hazardous. No MSDS required.

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**Research Areas**

Autophagy, Cancer, Cytokine Signaling, Developmental Biology, Immunology, Neural Stem Cells, Signal Transduction, Stem Cell Differentiation, Transcription Factors

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