

Mouse SOX4 Monoclonal Antibody | anti-SOX4 antibody

SOX4 (Master Regulator of Epithelial-Mesenchymal Transition)

CATALOG # AAA214688	HOST Mouse	REACTIVITY Human. Others not tested.	APPLICATIONS Immunohistochemistry
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PRODUCT SYNONYMS

SOX4; Monoclonal Antibody; SOX4 (Master Regulator of Epithelial-Mesenchymal Transition); SOX; SRY (sex determining region Y) box 4; SRY box containing gene 4; SRY related HMG box gene 4; Transcription factor SOX-4; anti-SOX4 antibody

PRODUCT SPECIFICATIONS

Host	Mouse
Reactivity	Human. Others not tested.
Clonality	Monoclonal
Isotype	IgG2b, kappa
Clone Number	SOX4/2540
Specificity	SOX4 is a member of the SOX (SRY-related HMG-box) family of transcription factors with a critical role in embryonic development and in cell-fate determination during organogenesis of the heart, pancreas, brain, and in B and T lymphocyte differentiation. SOX4 gene expression is upregulated in many cancer types, and increased SOX4 activity contributes to cellular transformation, cell survival, and metastasis. Gene expression profiling has uncovered SOX4 with upregulated activity during TGF-beta-induced epithelial-mesenchymal transition (EMT) in normal and cancerous breast epithelial cells. SOX4 is indispensable for EMT and cell survival in vitro and for primary tumor growth and metastasis in vivo. SOX4 is identified as a master regulator of EMT by governing the expression of the epigenetic modifier Ezh2.
Form/Format	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.
Sequence Length	474
Applicable Applications for anti-SOX4 antibody	IHC (Immunohistochemistry)
Immunogen	Recombinant full-length human SOX4 protein
Cellular Localization	Nuclear
Hu-chromosome Location	6p22.3
Positive Control	Breast or Colon Carcinoma
Preparation and Storage	Antibody with azide - store at at 2-8 degree C. Antibody is stable for 24 months. Non-hazardous. No MSDS required.

IMAGES



Application Data

Analysis of Protein Array containing more than 19, 000 full-length human proteins using SOX4 Mouse Monoclonal Antibody (SOX4/2540). 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 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.



SDS-PAGE

SDS-PAGE Analysis Purified SOX4 Mouse Monoclonal Antibody (SOX4/2540). Confirmation of Integrity and Purity of Antibody.



IHC (Immunohistochemistry)

Formalin-fixed, paraffin-embedded human Breast Carcinoma stained with SOX4 Mouse Monoclonal Antibody (SOX4/2540).



IHC (Immunohistochemistry)

Formalin-fixed, paraffin-embedded human Colon Carcinoma stained with SOX4 Mouse Monoclonal Antibody (SOX4/2540).

ADDITIONAL INFORMATION

References	Neha Tiwari, Vijay K. Tiwari, Lorenz Waldmeier, Phil Arnold, Mikhail Pachkov, Nathalie Meyer-Schaller, Dirk Schubeler, Erikvan Nimwegen, Gerhard Christofori. Sox4 Is a Master Regulator of Epithelial-Mesenchymal Transition by Controlling Ezh2 Expression and Epigenetic Reprogramming. Cancer Cell, 23 (6), 2013; 768-783.
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NCBI AND UNIPROT INFORMATION

NCBI GI #	4507163
NCBI GeneID	6659
NCBI Accession #	NP_003098.1
NCBI GenBank Nucleotide #	NM_003107.2
UniProt Accession #	Q06945
Molecular Weight	47kDa
NCBI Official Full Name	transcription factor SOX-4
NCBI Official Synonym Full Names	SRY-box 4
NCBI Official Symbol	SOX4
NCBI Official Synonym Symbols	EVI16
NCBI Protein Information	transcription factor SOX-4
UniProt Protein Name	Transcription factor SOX-4
UniProt Gene Name	SOX4

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.