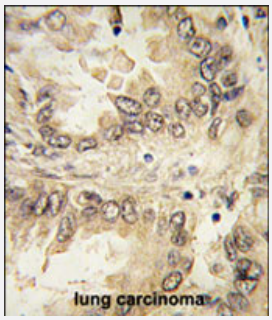
SOX2 polyclonal antibody

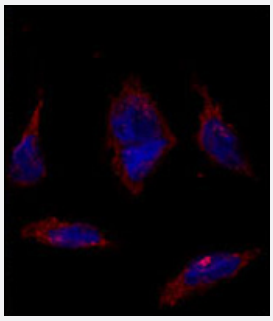
Catalog # PAB3876 Size 400 uL

Applications



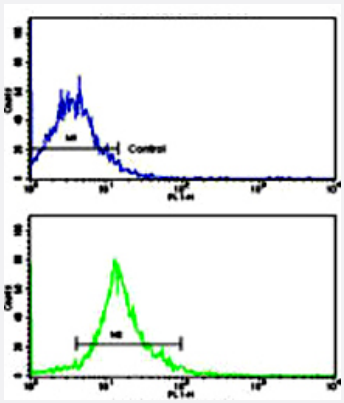
Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections)

Formalin-fixed and paraffin-embedded human lung carcinoma tissue reacted with SOX2 polyclonal antibody (Cat # PAB3876) , which was peroxidase-conjugated to the secondary antibody, followed by DAB staining. This data demonstrates the use of this antibody for immunohistochemistry; clinical relevance has not been evaluated.



Immunofluorescence

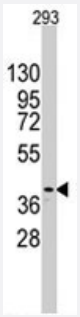
Immunofluorescence analysis of SOX2 polyclonal antibody (Cat # PAB3876) in HeLa cells. 0.025 mg/mL primary antibody was followed by Alexa-Fluor-546-conjugated donkey anti-rabbit IgG (H+L). Alexa-Fluor-546 emits orange fluorescence. Blue counterstaining is DAPI.



Flow Cytometry

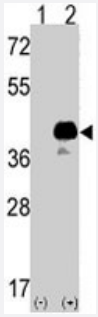
Flow cytometric analysis of NCI-H292 cells using SOX2 polyclonal antibody (Cat # PAB3876)(bottom histogram) compared to a negative control cell (top histogram).
FITC-conjugated goat-anti-rabbit secondary antibodies were used for the analysis.

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Western Blot (Cell lysate)

Western blot analysis of SOX2 polyclonal antibody (Cat # PAB3876) in 293 cell line lysates (35 ug/lane). SOX2 (arrow) was detected using the purified polyclonal antibody.



Western Blot (Transfected lysate)

Western blot analysis of SOX2 (arrow) using rabbit SOX2 polyclonal antibody (Cat # PAB3876). 293 cell lysates (2 ug/lane) either nontransfected (Lane 1) or transiently transfected with the SOX2 gene (Lane 2) (Origene Technologies).

Specification

Product Description	Rabbit polyclonal antibody raised against synthetic peptide of SOX2.
Immunogen	A synthetic peptide (conjugated with KLH) corresponding to N-terminus of human SOX2.
Host	Rabbit
Reactivity	Human
Form	Liquid
Purification	Ammonium sulfate precipitation
Recommend Usage	Flow Cytometry (1:10-50) Immunofluorescence (1:10-50) Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) (1:10-50) Western Blot (1:1000) The optimal working dilution should be determined by the end user.
Storage Buffer	In PBS (0.09% sodium azide)
Storage Instruction	Store at 4°C. For long term storage store at -20°C. Aliquot to avoid repeated freezing and thawing.
Note	This product contains sodium azide: a POISONOUS AND HAZARDOUS SUBSTANCE which shoul d be handled by trained staff only.

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Applications

- Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections)

  Formalin-fixed and paraffin-embedded human lung carcinoma tissue reacted with SOX2 polyclonal antibody (Cat # PAB3876) , which was peroxidase-conjugated to the secondary antibody, followed by DAB staining. This data demonstrates the use of this antibody for immunohistochemistry; clinical relevance has not been evaluated.

- Immunofluorescence

  Immunofluorescence analysis of SOX2 polyclonal antibody (Cat # PAB3876) in HeLa cells. 0.025 mg/mL primary antibody was followed by Alexa-Fluor-546-conjugated donkey anti-rabbit IgG (H+L). Alexa-Fluor-546 emits orange fluorescence. Blue counterstaining is DAPI.

- Flow Cytometry

  Flow cytometric analysis of NCI-H292 cells using SOX2 polyclonal antibody (Cat # PAB3876)(bottom histogram) compared to a negative control cell (top histogram).
  FITC-conjugated goat-anti-rabbit secondary antibodies were used for the analysis.

- Western Blot (Cell lysate)

  Western blot analysis of SOX2 polyclonal antibody (Cat # PAB3876) in 293 cell line lysates (35 ug/lane). SOX2 (arrow) was detected using the purified polyclonal antibody.

- Western Blot (Transfected lysate)

  Western blot analysis of SOX2 (arrow) using rabbit SOX2 polyclonal antibody (Cat # PAB3876). 293 cell lysates (2 ug/lane) either nontransfected (Lane 1) or transiently transfected with the SOX2 gene (Lane 2) (Origene Technologies).

Gene Info — SOX2

Entrez GeneID	6657
Protein Accession#	NP_003097;P48431
Gene Name	SOX2
Gene Alias	ANOP3, MCOPS3, MGC2413
Gene Description	SRY (sex determining region Y)-box 2
Omim ID	184429 206900
Gene Ontology	Hyperlink

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Gene Summary	This intronless gene encodes 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. The product of this gene is required for stem-cell maintenance in the central nervous system, and also regulates gene expression in the stomach. Mutations in this gene have been associated with optic nerve hypoplasia and with syndromic microphthalmia, a severe form of structural eye malformation. This gene lies within an intron of another gene called SOX2 overlapping transcript (SOX2 OT). [provided by RefSeq
Other Designations	SRY-related HMG-box gene 2|sex-determining region Y-box 2|transcription factor SOX2

Publication Reference

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- Formation of pluripotent stem cells in the mammalian embryo depends on the POU transcription factor Oct4.

  Nichols J, Zevnik B, Anastassiadis K, Niwa H, Klewe-Nebenius D, Chambers I, Scholer H, Smith A.

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Disease

- Anophthalmos
- Coloboma
- Diabetes Mellitus
- Diabetic Nephropathies
- Genetic Predisposition to Disease
- Kidney Failure
- Microphthalmos

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- Myopia

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