

Product datasheet

Anti-SOX2 antibody [SP76] ab93689

Recombinant RabMAb

★★★★★ 1 Abreviews 28 References 13 Images

Overview

Product name	Anti-SOX2 antibody [SP76]
Description	Rabbit monoclonal [SP76] to SOX2
Host species	Rabbit
Tested applications	Suitable for: IHC-P, ICC/IF, Flow Cyt (Intra), WB
Species reactivity	Reacts with: Mouse, Rat, Human
Immunogen	Synthetic peptide within Human SOX2 aa 1-100 (N terminal). The exact sequence is proprietary. Database link: P48431
Positive control	IHC-P: Human prostate, newborn brain, Human lung carcinoma, Mouse stomach, and Rat stomach tissue; WB: MCF7 cell lysate; Flow Cyt (Intra): F9, and NCCIT cells; ICC: F9, and NCCIT cells.
General notes	This product is FOR RESEARCH USE ONLY. For commercial use, please contact partnerships@abcam.com.

Properties

Form	Liquid
Storage instructions	Shipped at 4°C. Upon delivery aliquot and store at -20°C or -80°C. Avoid repeated freeze / thaw cycles.
Storage buffer	pH: 7.60 Preservative: 0.1% Sodium azide Constituents: PBS, 1% BSA
Purity	Protein A/G purified
Purification notes	Purified from TCS by protein A/G.
Clonality	Monoclonal
Clone number	SP76
Isotype	IgG

Applications

The Abpromise guarantee

Our **Abpromise guarantee** covers the use of ab93689 in the following tested applications.

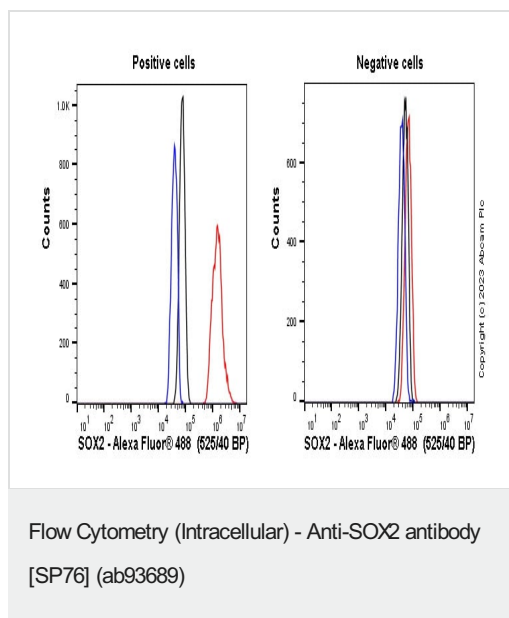
The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Application	Abreviews	Notes
IHC-P		1/100. Antigen Retrieval is recommended, boil tissue section in 10mM citrate buffer, pH 6.0 for 10 minutes followed by cooling at RT for 20 minutes.
ICC/IF		1/50.
Flow Cyt (Intra)		1/200.
WB		1/100. Predicted molecular weight: 34 kDa.

Target

Function	Transcription factor that forms a trimeric complex with OCT4 on DNA and controls the expression of a number of genes involved in embryonic development such as YES1, FGF4, UTF1 and ZFP206 (By similarity). Critical for early embryogenesis and for embryonic stem cell pluripotency.
Involvement in disease	Defects in SOX2 are the cause of microphthalmia syndromic type 3 (MCOPS3) [MIM:206900]. Microphthalmia is a clinically heterogeneous disorder of eye formation, ranging from small size of a single eye to complete bilateral absence of ocular tissues (anophthalmia). In many cases, microphthalmia/anophthalmia occurs in association with syndromes that include non-ocular abnormalities. MCOPS3 is characterized by the rare association of malformations including uni- or bilateral anophthalmia or microphthalmia, and esophageal atresia with trachoesophageal fistula.
Sequence similarities	Contains 1 HMG box DNA-binding domain.
Post-translational modifications	Sumoylation inhibits binding on DNA and negatively regulates the FGF4 transactivation.
Cellular localization	Nucleus.

Images



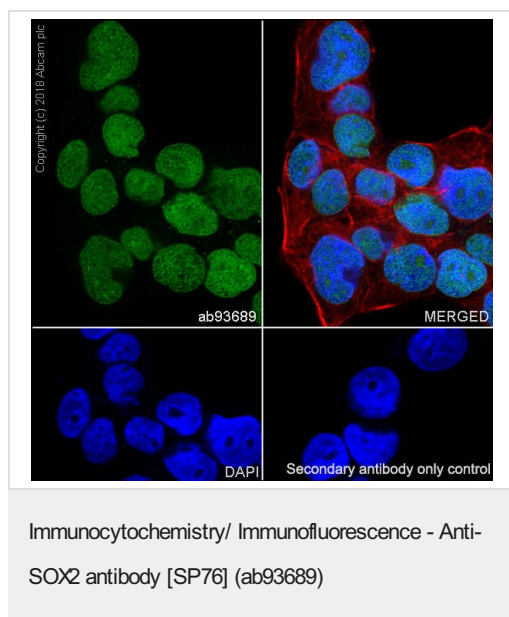
Flow cytometry overlay histogram showing left NCCIT positive cells and right negative HeLa stained with ab93689 (red line). The cells were fixed with 80% methanol (5 min) and then permeabilised with 0.1% PBS-Triton X-100 for 15 min. The cells were then incubated in 1x PBS containing 10% normal goat serum to block non-specific protein-protein interaction followed by the antibody (ab93689) (1×10^6 in 100 μ l at 0.04 μ g/ml (1/52000)) for 30min at 22°C.

The secondary antibody Goat Anti-Rabbit IgG H&L (Alexa Fluor® 488) preadsorbed was incubated at 1/4000 for 30min at 22°C

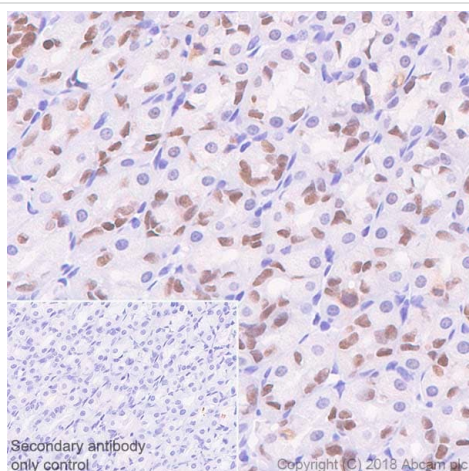
Isotype control antibody (black line) was Recombinant Rabbit IgG, monoclonal [EPR25A] - Isotype Control used at the same concentration and conditions as the primary antibody. Unlabelled sample (blue line) was also used as a control.

Acquisition of >5000 events were collected using a 50 mW Blue laser (488nm) and 525/40 bandpass filter.

This antibody gave a positive signal in NCCIT Fixed with 4% formaldehyde (10 min) / permeabilised with 0.1% PBS-Triton X-100 for 15 min under the same conditions.

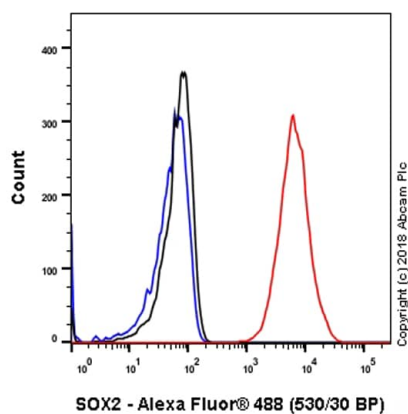


Immunocytochemistry/ Immunofluorescence analysis of NCCIT (human pluripotent embryonic carcinoma epithelial cell) cells labeling SOX2 with purified ab93689 at 1:50 (2.8 μ g/ml). Cells were fixed in 100% Methanol and permeabilized with None. Cells were counterstained with Ab195889 Anti-alpha Tubulin antibody [DM1A] - Microtubule Marker (Alexa Fluor® 594) 1:200 (2.5 μ g/ml). Goat anti rabbit IgG (Alexa Fluor® 488, **ab150077**) was used as the secondary antibody at 1:1000 (2 μ g/ml) dilution. DAPI nuclear counterstain. PBS instead of the primary antibody was used as the secondary antibody only control.



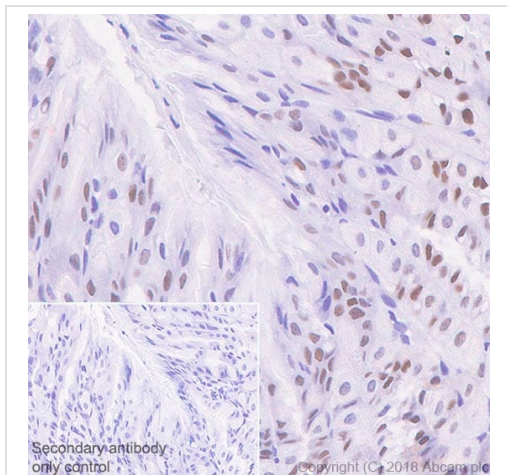
Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-SOX2 antibody [SP76] (ab93689)

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) analysis of Rat stomach tissue sections labeling SOX2 with ab93689 at 1/100 dilution (1.37 µg/ml). Heat mediated antigen retrieval was performed Heat mediated antigen retrieval with sodium citrate buffer (pH 6.0, epitope retrieval solution 1) for 10 mins. Rabbit specific IHC polymer detection kit HRP/DAB (**ab209101**) was used as the secondary antibody. Negative control: PBS instead of the primary antibody. Hematoxylin was used as a counterstain.



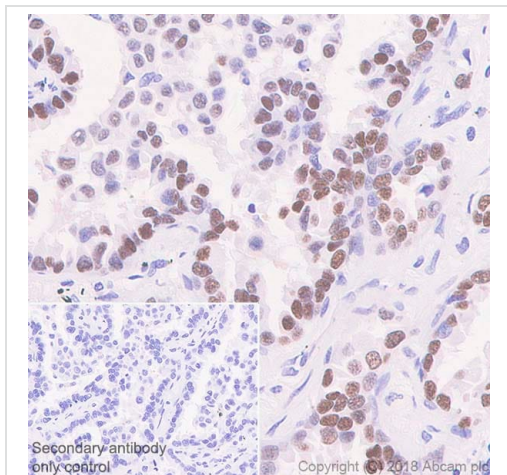
Flow Cytometry (Intracellular) - Anti-SOX2 antibody [SP76] (ab93689)

Flow Cytometry analysis of F9(Mouse embryonal carcinoma epithelial cell) cells labeling SOX2 with purified ab93689 at 1:200 dilution (0.685 µg/ml) Red. Cells were fixed with 4% paraformaldehyde . A Goat anti rabbit IgG (Alexa Fluor® 488, **ab150077**) secondary antibody was used at 1:2000 dilution. Isotype control - Rabbit monoclonal IgG (**ab172730**) (Black). Unlabeled control - Unlabelled cells (Blue).



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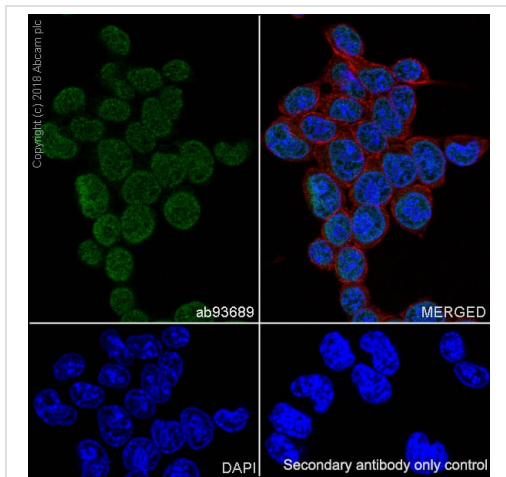
Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-SOX2 antibody [SP76] (ab93689)

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) analysis of Human lung carcinoma tissue sections labeling SOX2 with ab93689 at 1/100 dilution (1.37 µg/ml). Heat mediated antigen retrieval was performed Heat mediated antigen retrieval with sodium citrate buffer (pH 6.0, epitope retrieval solution 1) for 10 mins. Rabbit specific IHC polymer detection kit HRP/DAB (**ab209101**) was used as the secondary antibody. Negative control: PBS instead of the primary antibody. Hematoxylin was used as a counterstain.



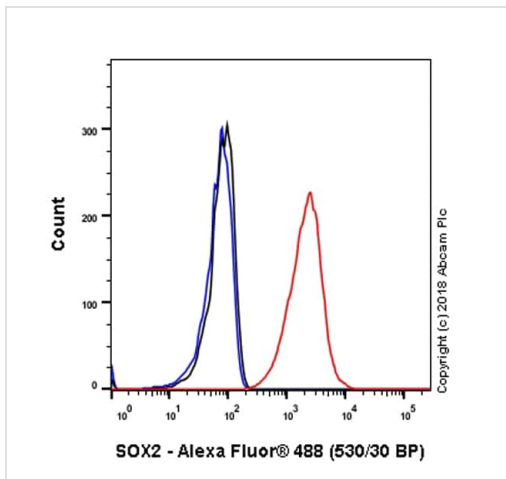
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Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) analysis of Human prostate tissue sections labeling SOX2 with ab93689 at 1/100 dilution (1.37 µg/ml). Heat mediated antigen retrieval was performed Heat mediated antigen retrieval with sodium citrate buffer (pH 6.0, epitope retrieval solution 1) for 10 mins. Rabbit specific IHC polymer detection kit HRP/DAB (**ab209101**) was used as the secondary antibody. Negative control: PBS instead of the primary antibody. Hematoxylin was used as a counterstain.



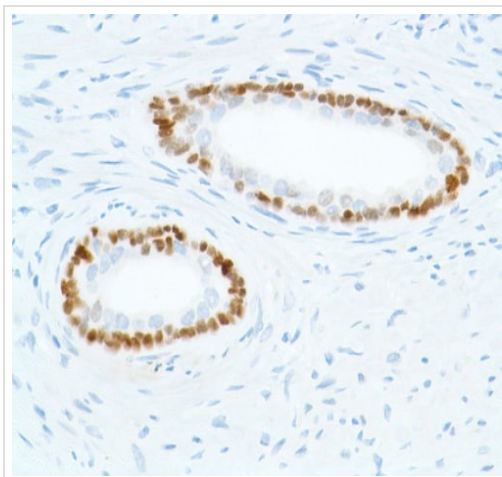
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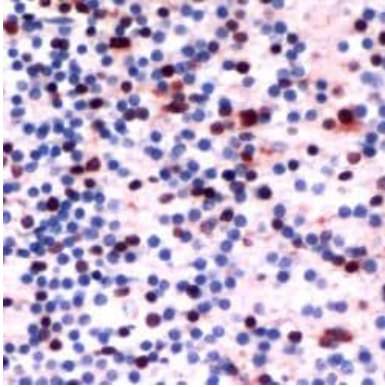
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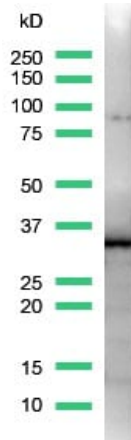
Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-SOX2 antibody [SP76]
(ab93689)

Immunohistochemical analysis of human prostate tissue labeling SOX2 with ab93689.



Formalin-fixed paraffin-embedded human newborn brain tissue stained for SOX2 using ab93689 at 1/100 dilution in immunohistochemical analysis.

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-SOX2 antibody [SP76] (ab93689)







Anti-SOX2 antibody [SP76] (ab93689) at 1/100 dilution + MCF7 (Human breast adenocarcinoma cell line) cell lysate

Predicted band size: 34 kDa

Observed band size: 34 kDa

Western blot - Anti-SOX2 antibody [SP76] (ab93689)

Why choose a recombinant antibody?

 <p>Research with confidence Consistent and reproducible results</p>	 <p>Long-term and scalable supply Recombinant technology</p>
 <p>Success from the first experiment Confirmed specificity</p>	 <p>Ethical standards compliant Animal-free production</p>

Anti-SOX2 antibody [SP76] (ab93689)

Please note: All products are "FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC PROCEDURES"

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