abcam

Product datasheet

Anti-SOX2 antibody - ChIP Grade ab59776

9 Abreviews 62 References 2 Images

Overview

Product name	Anti-SOX2 antibody - ChIP Grade
Description	Rabbit polyclonal to SOX2 - ChIP Grade
Host species	Rabbit
Tested applications	**Suitable for:** WB, ICC/IF, ChIP-sequencing, IHC-P, ChIP
Species reactivity	**Reacts with:** Mouse, Human **Predicted to work with:** Chicken, Xenopus laevis
Immunogen	Synthetic peptide made from the N-terminal region of human SOX2 protein within residues 1-100.
Positive control	Human uterus tissue. FFPE mouse e14 whole foetus tissue sections

Properties

Form	Liquid
Storage instructions	Shipped at 4°C. Store at +4°C short term (1-2 weeks). Upon delivery aliquot. Store at -20°C or -80°C. Avoid freeze / thaw cycle.
Storage buffer	Constituents: PBS, 5% Trehalose
Purity	Protein A purified
Clonality	Polyclonal
Isotype	IgG

Applications

The Abpromise guarantee Our Abpromise guarantee covers the use of ab59776 in the following tested applications.

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

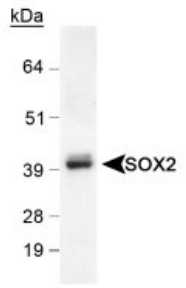
Application	Abreviews	Notes
WB	(4)	Use a concentration of 0.2 - 0.5 µg/ml. Predicted molecular weight: 40 kDa.
ICC/IF	(3)	1/200.

Application	Abreviews	Notes
ChIP-sequencing		Use at an assay dependent concentration. PubMed: 21211035
IHC-P		1/250 - 1/500.
ChIP		Use at an assay dependent concentration. PubMed: 22814375

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.

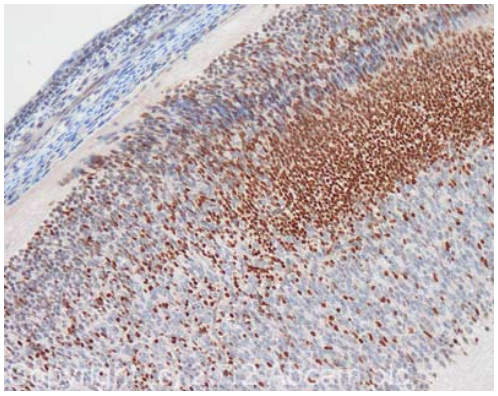
Images



Western blot - Anti-SOX2 antibody - ChIP Grade (ab59776)

Anti-SOX2 antibody - ChIP Grade (ab59776) at 0.1 µg/ml + mouse brain lysate

Predicted band size: 40 kDa
Observed band size: 40 kDa



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-SOX2 antibody - ChIP Grade (ab59776)

IHC image of SOX2 staining in mouse e14 whole foetus formalin fixed paraffin embedded tissue section, performed on a Leica Bond™ system using the standard protocol B. The section was pre-treated using heat mediated antigen retrieval with sodium citrate buffer (pH6, epitope retrieval solution 1) for 20 mins. The section was then incubated with ab59776, 1µg/ml, for 15 mins at room temperature. A goat anti-rabbit biotinylated secondary antibody was used to detect the primary, and visualized using an HRP conjugated ABC system. DAB was used as the chromogen. The section was then counterstained with haematoxylin and mounted with DPX.

For other IHC staining systems (automated and non-automated) customers should optimize variable parameters such as antigen retrieval conditions, primary antibody concentration and antibody incubation times.

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