


Product datasheet

Anti-SOX2 antibody ab137385

★★★★☆ [2 Abreviews](#) [25 References](#) [8 Images](#)

Overview

Product name	Anti-SOX2 antibody
Description	Rabbit polyclonal to SOX2
Host species	Rabbit
Tested applications	Suitable for: Flow Cyt, WB, IHC-P, ICC/IF
Species reactivity	Reacts with: Mouse, Human Predicted to work with: Rat, Cow, Cat, Monkey 
Immunogen	Recombinant fragment within Human SOX2 (internal sequence). The exact sequence is proprietary. Database link: P48431
Positive control	WB: Recombinant Human SOX2 protein (ab79950), NT2D1 whole cell lysate. Human and mouse embryonic stem cell lysate. ICC/IF: Human and mouse embryonic stem cells. A549 cells. IHC-P: Human Cal27 xenograft tissue. Flow Cytometry: Human embryonic stem cells.
General notes	<p>The Life Science industry has been in the grips of a reproducibility crisis for a number of years. Abcam is leading the way in addressing this with our range of recombinant monoclonal antibodies and knockout edited cell lines for gold-standard validation. Please check that this product meets your needs before purchasing.</p> <p>If you have any questions, special requirements or concerns, please send us an inquiry and/or contact our Support team ahead of purchase. Recommended alternatives for this product can be found below, along with publications, customer reviews and Q&As</p>

Properties

Form	Liquid
Storage instructions	Shipped at 4°C. Upon delivery aliquot. Store at -20°C or -80°C. Avoid freeze / thaw cycle.
Storage buffer	pH: 7.00 Preservative: 0.025% Proclin 300 Constituents: 78% PBS, 1% BSA, 20% Glycerol (glycerin, glycerine)
Purity	Immunogen affinity purified
Clonality	Polyclonal
Isotype	IgG

Applications

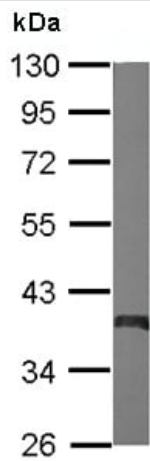
The Abpromise guarantee Our **Abpromise guarantee** covers the use of ab137385 in the following tested applications. The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Application	Abreviews	Notes
Flow Cyt		1/50 - 1/200. ab171870 - Rabbit polyclonal IgG, is suitable for use as an isotype control with this antibody.
WB	★★★★☆ (1)	1/500 - 1/3000. Predicted molecular weight: 34 kDa.
IHC-P		1/100 - 1/1000. Perform heat mediated antigen retrieval with citrate buffer pH 6 before commencing with IHC staining protocol. or Tris-EDTA buffer (pH8.0)
ICC/IF	★★★★★ (1)	1/50 - 1/500.

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

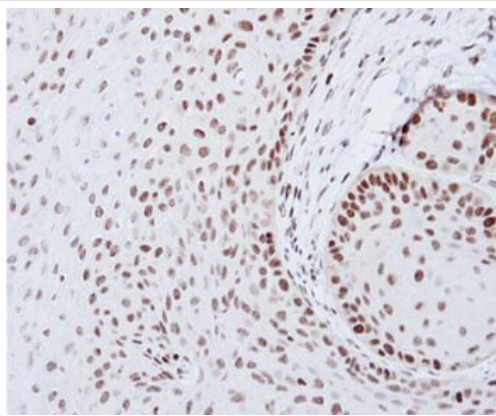


Western blot - Anti-SOX2 antibody (ab137385)

Anti-SOX2 antibody (ab137385) at 1/1000 dilution + Human ESC whole cell lysate at 20 μ g

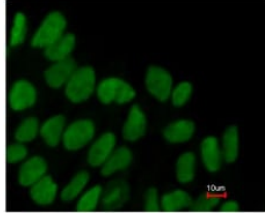
Predicted band size: 34 kDa

10% SDS-PAGE gel



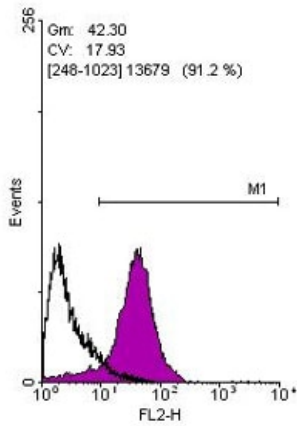
Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-SOX2 antibody (ab137385)

Formalin-fixed, paraffin-embedded Cal27 xenograft tissue stained for SOX2 with ab137385 at a 1/100 dilution in immunohistochemical analysis.



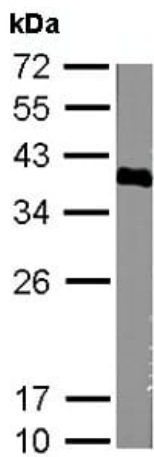
Immunocytochemistry/ Immunofluorescence - Anti-SOX2 antibody (ab137385)

Human embryonic stem cells stained for SOX2 (green) using ab137385 (1/160 dilution) in ICC/IF. Lower panel is costained with Hoechst 33342.



Flow Cytometry - Anti-SOX2 antibody (ab137385)

Flow cytometric analysis of human embryonic stem cells, labelling SOX2 with ab137385 at 1/100 dilution (purple) compared to a rabbit IgG control (black).

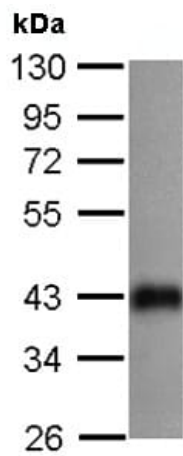


Western blot - Anti-SOX2 antibody (ab137385)

Anti-SOX2 antibody (ab137385) at 1/1000 dilution + Mouse ESC whole cell lysate at 20 μ g

Predicted band size: 34 kDa

12% SDS-PAGE gel

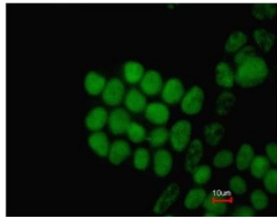


Western blot - Anti-SOX2 antibody (ab137385)

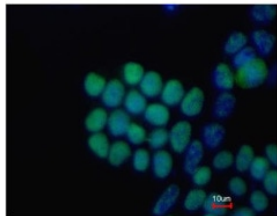
Anti-SOX2 antibody (ab137385) at 1/3000 dilution + NT2D1 whole cell lysate at 30 μ g

Predicted band size: 34 kDa

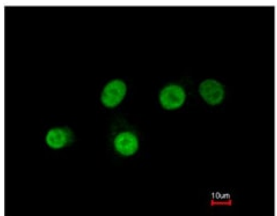
10% SDS-PAGE gel



Mouse embryonic stem cells stained for SOX2 (green) using ab137385 (1/160 dilution) in ICC/IF. Lower panel is costained with Hoechst 33342.



Immunocytochemistry/ Immunofluorescence - Anti-SOX2 antibody (ab137385)



Paraformaldehyde-fixed A549 cells stained for SOX2 (green) using ab137385 (1/200 dilution) in ICC/IF. Lower panel is merged with a DNA probe.



Immunocytochemistry/ Immunofluorescence - Anti-SOX2 antibody (ab137385)

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

Our Abpromise to you: Quality guaranteed and expert technical support

- Replacement or refund for products not performing as stated on the datasheet
- Valid for 12 months from date of delivery
- Response to your inquiry within 24 hours

- We provide support in Chinese, English, French, German, Japanese and Spanish
- Extensive multi-media technical resources to help you
- We investigate all quality concerns to ensure our products perform to the highest standards

If the product does not perform as described on this datasheet, we will offer a refund or replacement. For full details of the Abpromise, please visit <https://www.abcam.com/abpromise> or contact our technical team.

Terms and conditions

- Guarantee only valid for products bought direct from Abcam or one of our authorized distributors