# abcam

## Product datasheet

## Anti-SOX2 antibody [EPR3130] ab133337

Recombinant RabMAb

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### Overview

**Product name** Anti-SOX2 antibody [EPR3130]

**Description** Rabbit monoclonal [EPR3130] to SOX2

**Host species** Rabbit

**Tested applications** Suitable for: IHC-P, WB, IP

Unsuitable for: Flow Cyt or ICC/IF

Reacts with: Human Species reactivity

**Immunogen** Synthetic peptide within Human SOX2 aa 250-350. The exact sequence is proprietary.

Positive control WB: NCCIT cell lysate; IHC: Human fetal brain, Human normal brain and glioma tissue. IP: NCCIT.

**General notes** This product is a recombinant monoclonal antibody, which offers several advantages including:

- High batch-to-batch consistency and reproducibility

- Improved sensitivity and specificity

- Long-term security of supply

- Animal-free production

For more information see here.

Our RabMAb® technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to **RabMAb**® **patents**.

## **Properties**

**Form** Liquid

Storage instructions Shipped at 4°C. Store at -20°C. Stable for 12 months at -20°C.

Storage buffer pH: 7.20

Preservative: 0.05% Sodium azide

Constituents: 0.1% BSA, 40% Glycerol (glycerin, glycerine), 9.85% Tris glycine, 50% PBS

**Purity** Protein A purified

Clonality Monoclonal Clone number **EPR3130** 

Isotype ΙgG

## **Applications**

## The Abpromise guarantee

Our <u>Abpromise guarantee</u> covers the use of ab133337 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		1/50 - 1/100. Perform heat mediated antigen retrieval before commencing with IHC staining protocol.
WB		1/500 - 1/1000. Detects a band of approximately 35 kDa (predicted molecular weight: 34 kDa).
IP		1/10.

## **Application notes**

Is unsuitable for Flow Cyt or ICC/IF.

## **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 unior bilateral anophthalmia or microphthalmia, and esophageal atresia with trachoesophageal fistula.

## Sequence similarities

Contains 1 HMG box DNA-binding domain.

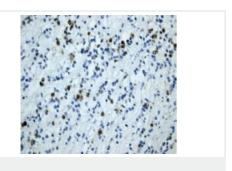
# Post-translational modifications

Sumoylation inhibits binding on DNA and negatively regulates the FGF4 transactivation.

#### **Cellular localization**

Nucleus.

## **Images**



Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-SOX2 antibody
[EPR3130] (ab133337)

Immunohistochemical analysis of Formalin-fixed, paraffin embedded Human fetal brain tissue labelling SOX2 with ab133337 at 1/50 dilution.

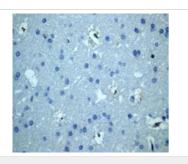
Perform heat mediated antigen retrieval before commencing with IHC staining protocol.



Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-SOX2 antibody
[EPR3130] (ab133337)

Immunohistochemical analysis of Formalin-fixed, paraffin embedded Human glioma tissue labelling SOX2 with ab133337 at 1/50 dilution.

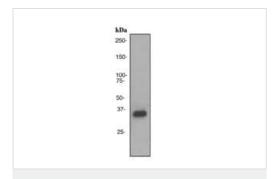
Perform heat mediated antigen retrieval before commencing with IHC staining protocol.



Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-SOX2 antibody
[EPR3130] (ab133337)

Immunohistochemical analysis of Formalin-fixed, paraffin embedded Human brain tissue staining SOX2 with ab133337 at 1/50 dilution.

Perform heat mediated antigen retrieval before commencing with IHC staining protocol.



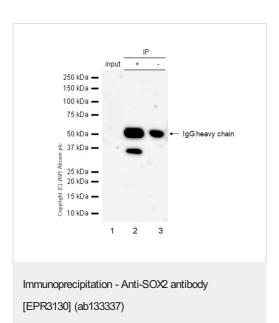
Western blot - Anti-SOX2 antibody [EPR3130] (ab133337)

Anti-SOX2 antibody [EPR3130] (ab133337) at 1/500 dilution + NCCIT cell lysate at 10  $\mu g$ 

## **Secondary**

Goat Anti-rabbit HRP at 1/2000 dilution

Predicted band size: 34 kDa Observed band size: 35 kDa



SOX2 was immunoprecipitated from 0.35 mg NCCIT (Human pluripotent embryonic carcinoma epithelial cell) whole cell lysate 10 µg with 133337 at 1/50 dilution (2µg). VeriBlot for IP Detection Reagent (HRP)(ab131366) was used at 1/5000 dilution.

Lane 1: NCCIT (Human pluripotent embryonic carcinoma epithelial cell) whole cell lysate 10 µg

Lane 2: ab133337 IP in NCCIT whole cell lysate

**Lane 3:** Rabbit monoclonal lgG (<u>ab172730</u>) instead of ab133337 in NCCIT whole cell lysate

Blocking and dilution buffer and concentration: 5% NFDM/TBST.



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

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