# abcam

### **Product datasheet**

## Anti-SOX2 antibody [EPR3131] - BSA and Azide free ab215970

אילארבע RabMAb

★★★★☆ <u>1 Abreviews</u> 画像数 17

#### 製品の概要

製品名	Anti-SOX2 antibody [EPR3131] - BSA and Azide free
製品の詳細	Rabbit monoclonal [EPR3131] to SOX2 - BSA and Azide free
由来種	Rabbit
特異性	The Rat recommendation is based on the ICC results. WB signal in rat samples are very weak. We do not guarantee WB for Rat.
アプリケーション	適用あり: ICC/IF, IHC - Wholemount, WB, IHC-P, Sandwich ELISA 適用なし: Flow Cyt or IP
種交差性	交差種: Mouse, Rat, Human, Leucoraja erinacea
免疫原	Synthetic peptide. This information is proprietary to Abcam and/or its suppliers.
ポジティブ・コントロール	WB: NCCIT, F9 and MCF-7 cell lysates. IHC-P: Human gliocytoma, breast carcinoma, fetal stomach, fetal lung and embryonal carcinoma tissues. ICC/IF: NCCIT cells. IMC: Human glioblastoma brain cancer tissue
特記事項	ab215970 is the carrier-free version of <u>ab92494</u> .
	Our <u>carrier-free</u> antibodies are typically supplied in a PBS-only formulation, purified and free of BSA, sodium azide and glycerol. The carrier-free buffer and high concentration allow for increased conjugation efficiency.
	This conjugation-ready format is designed for use with fluorochromes, metal isotopes, oligonucleotides, and enzymes, which makes them ideal for antibody labelling, functional and cell-based assays, flow-based assays (e.g. mass cytometry) and Multiplex Imaging applications.
	Use our <b>conjugation kits</b> for antibody conjugates that are ready-to-use in as little as 20 minutes with <1 minute hands-on-time and 100% antibody recovery: available for fluorescent dyes, HRP, biotin and gold.
	This product is compatible with the Maxpar <sup>®</sup> Antibody Labeling Kit from Fluidigm, without the need for antibody preparation. Maxpar <sup>®</sup> is a trademark of Fluidigm Canada Inc.
	<ul> <li>This product is a recombinant monoclonal antibody, which offers several advantages including:</li> <li>High batch-to-batch consistency and reproducibility</li> <li>Improved sensitivity and specificity</li> <li>Long-term security of supply</li> <li>Animal-free production</li> <li>For more information <u>see here</u>.</li> </ul>

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

#### 製品の特性

製品の状態	Liquid
保存方法	Shipped at 4°C. Store at +4°C. Do Not Freeze.
バッファー	pH: 7.20 Constituent: PBS
キャリア・フリー	はい
精製度	Protein A purified
ポリ/モノ	モノクローナル
クローン名	EPR3131
アイソタイプ	lgG

アプリケーション

The Abpromise guaranteeAbpromise保証は、<br/>次のテスト済みアプリケーションにおけるab215970の使用に適用されますアプリケーションノートには、推奨の開始希釈率がありますが、適切な希釈率につきましてはご検討ください。

アプリケーション	Abreviews	特記事項
ICC/IF		Use at an assay dependent concentration.
IHC - Wholemount		Use at an assay dependent concentration.
WB		Use at an assay dependent concentration. Detects a band of approximately 35 kDa (predicted molecular weight: 34 kDa).
IHC-P		Use at an assay dependent concentration. Perform heat mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol. See <b>IHC antigen retrieval protocols</b> .
Sandwich ELISA		Use at an assay dependent concentration. For sandwich ELISA, use this antibody as Detection at 0.5 $\mu$ g/ml with Rabbit monoclonal [EPR3131] to SOX2 ( <b>ab92494</b> ) as Capture.

#### 追加情報

Is unsuitable for Flow Cyt or IP.

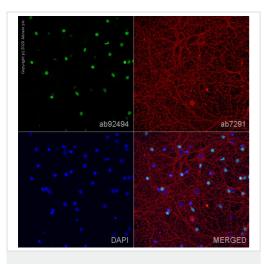
#### ターゲット情報

#### 機能

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.

関連疾患	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.
配列類似性	Contains 1 HMG box DNA-binding domain.
翻訳後修飾	Sumoylation inhibits binding on DNA and negatively regulates the FGF4 transactivation.
細胞内局在	Nucleus.

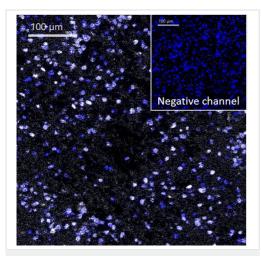
画像



Immunocytochemistry/ Immunofluorescence - Anti-SOX2 antibody [EPR3131] - BSA and Azide free (ab215970) This data was developed using the same antibody clone in a different buffer formulation containing PBS and sodium azide (<u>ab92494</u>)

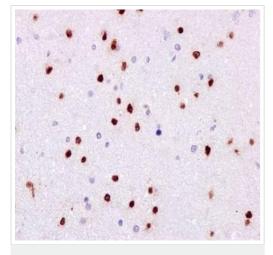
**ab92494** staining SOX2 in primary hippocampal rat neurons/glia, (obtained from Neuromics, cat. no. PC35101), DIV14. The cells were fixed with 4% paraformaldehyde (10 min), permeabilized with 0.1% PBS-Triton X-100 for 5 minutes and then blocked with 1% BSA/10% normal goat serum/0.3M glycine in 0.1% PBS-Tween for 1h. The cells were then incubated overnight at 4°C with **ab92494** at 1/100 dilution and **ab7291**, Mouse monoclonal [DM1A] to alpha Tubulin - Loading Control. Cells were then incubated with **ab150081**, Goat polyclonal Secondary Antibody to Rabbit IgG - H&L (Alexa Fluor<sup>®</sup> 488), pre-adsorbed at 1/1000 dilution (shown in green) and **ab150120**, Goat polyclonal Secondary Antibody to Mouse IgG - H&L (Alexa Fluor<sup>®</sup> 594), pre-adsorbed at 1/1000 dilution (shown in pseudocolour red). Nuclear DNA was labelled with DAPI (shown in blue).

Image was acquired with a high-content analyser (Operetta CLS, Perkin Elmer) and a maximum intensity projection of confocal sections is shown.



Mass Cytometry - Anti-SOX2 antibody [EPR3131] -BSA and Azide free (ab215970)

This image is courtesy of the Single Cell & Imaging Mass Cytometry Analysis Platform, Goodman Cancer Research Centre, McGill University

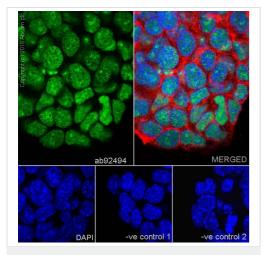


Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-SOX2 antibody [EPR3131] - BSA and Azide free (ab215970)

Imaging Mass Cytometry<sup>™</sup> (IMC<sup>™</sup>) image of human glioblastoma brain cancer tissue stained with Anti-SOX2 antibody [EPR3131]. ab215970 (carrier-free antibody, purified) was metalconjugated using a Maxpar® Antibody Labeling Kit from Fluidigm. Immunostaining was performed according to Fluidigm's protocols. Briefly, slides were subject to deparaffinization and heat-induced epitope retrieval, followed by overnight incubation at 4°C with an antibody cocktail containing metal-tagged antibodies in blocking buffer. Slides were subsequently washed with 0.2% Triton-X and 1x PBS, counterstained with Cell-ID<sup>™</sup> Intercalator-Ir diluted at 1/400 in 1x PBS for 30 min at room temperature, rinsed for 5 min with distilled H2O, and air-dried prior to IMC<sup>™</sup> acquisition. IMC<sup>™</sup> acquisition was performed using the Fluidigm Hyperion<sup>™</sup> Imaging System.

Imaging Mass Cytometry<sup>™</sup>, IMC<sup>™</sup>, Cell-ID<sup>™</sup>, Hyperion<sup>™</sup> and Maxpar® are trademarks of Fluidigm Canada

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) analysis of human gliocytoma tissue labelling SOX2 with purified **ab92494** at 1/100. Heat mediated antigen retrieval was performed using Tris/EDTA buffer pH 9. A prediluted HRP-polymer conjugated anti-rabbit IgG was used as the secondary antibody. Counterstained with Hematoxylin.



Immunocytochemistry/ Immunofluorescence - Anti-SOX2 antibody [EPR3131] - BSA and Azide free (ab215970)

ab92494 MERGED

Immunocytochemistry/ Immunofluorescence - Anti-SOX2 antibody [EPR3131] - BSA and Azide free (ab215970) Confocal image showing nuclear staining on F9 cells

Ab92494 staining SOX2 in the F9 (mouse embryonal carcinoma) cell line by ICC/IF (Immunocytochemistry/immunofluorescence). Cells were fixed with 4% PFA, permeabilized with 0.1% Triton-X. Samples were incubated with primary antibody (1/200). An Alexa Fluor® 488-conjugated Goat anti-Rabbit IgG, Ab150077 (1/1000) was used as the secondary antibody. Counterstained with Ab7291 anti-Tubulin (1/1000), Ab150120 AlexaFluor®594 Goat anti-Mouse secondary (1/1000). DAPI was used as a nuclear counter stain.

Negative control 1 Ab92494 was used as the primary antibody at 1/200 and Ab150120 was used as the secondary at 1/1000.

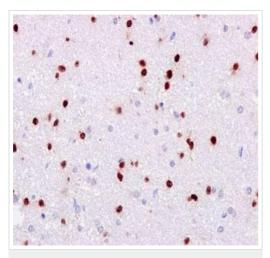
Negative control 2 Ab7291was used as the primary antibody at 1/1000 and Ab150077 was used as the secondary at 1/1000.<\p>

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (<u>ab92494</u>).

Confocal image showing nuclear staining on NCCIT cells Ab92494 staining SOX2 in NCCIT cells by ICC/IF (Immunocytochemistry/immunofluorescence). Cells were fixed with 4% PFA, permeabilized with 0.1% Triton-X. Samples were incubated with primary antibody (1/200). An Alexa Fluor® 488conjugated Goat anti-Rabbit IgG, Ab150077 (1/1000) was used as the secondary antibody. Counterstained with Ab7291 anti-Tubulin (1/1000), Ab150120 AlexaFluor®594 Goat anti-Mouse secondary (1/1000). DAPI was used as a nuclear counter stain.

Negative control 1 Ab92494 was used as the primary antibody at 1/200 and Ab150120 was used as the secondary at 1/1000.

Negative control 2 Ab7291was used as the primary antibody at 1/1000 and Ab150077 was used as the secondary at 1/1000.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) analysis of human gliocytoma tissue labelling SOX2 with unpurified <u>ab92494</u> at 1/60. Heat mediated antigen retrieval was performed using Tris/EDTA buffer pH 9. A prediluted HRP-polymer conjugated anti-rabbit IgG was used as the secondary antibody. Counterstained with Hematoxylin.

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (<u>ab92494</u>).

Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-SOX2 antibody [EPR3131] - BSA and Azide free (ab215970)

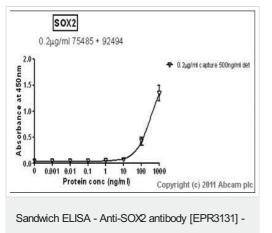


IHC - Wholemount - Anti-SOX2 antibody [EPR3131]

#### - BSA and Azide free (ab215970)

This image is courtesy of an Abreview submitted by Dr. Gillis.

IHC - Wholemount analysis of Leucoraja erinacea embryo labelling SOX2 with unpurified **ab92494** at 1/200. The sample was incubated with the primary antibody for 48 hours at 4°C in 10% fetal calf serum in PBT. Detection: DAB.



BSA and Azide free (ab215970)

Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-SOX2 antibody [EPR3131] - BSA and Azide free (ab215970)

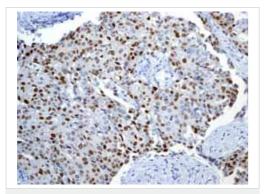
Standard Curve for SOX2 (Analyte: SOX2 protein (Human) (**ab79950**)); dilution range 1pg/ml to 1µg/ml using Capture Antibody Mouse monoclonal [57CT23.3.4] to SOX2 (**ab75485**) at 0.2µg/ml and Detector Antibody Rabbit monoclonal [EPR3131] to SOX2 (**ab92494**) at 0.5µg/ml.

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (<u>ab92494</u>).

**Negative control:** Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) analysis of negative human seminoma tissue using unpurified <u>ab92494</u>.

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (<u>ab92494</u>).

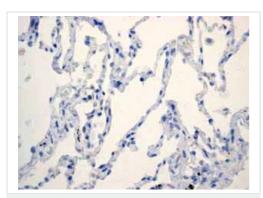
Perform heat mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol.



Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-SOX2 antibody [EPR3131] - BSA and Azide free (ab215970) Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) analysis of human breast carcinoma tissue labelling SOX2 with unpurified <u>ab92494</u>.

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (<u>ab92494</u>).

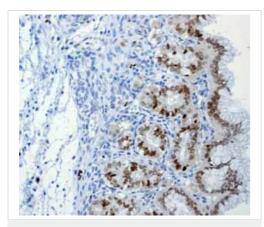
Perform heat mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol.



Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-SOX2 antibody [EPR3131] - BSA and Azide free (ab215970) Immunohistochemistry (Formalin/PFA-fixed parffin-embedded sections) analysis of normal human lung tissue. Unpurified <u>ab92494</u> shows negative staining.

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (<u>ab92494</u>).

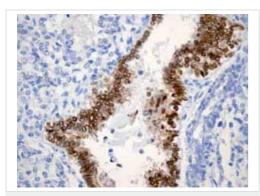
Perform heat mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol.



Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-SOX2 antibody [EPR3131] - BSA and Azide free (ab215970) Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) analysis of human fetal stomach tissue labelling SOX2 with unpurified <u>ab92494</u>.

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (<u>ab92494</u>).

Perform heat mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol.

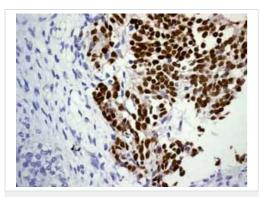


Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-SOX2 antibody [EPR3131] - BSA and Azide free (ab215970)

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) analysis of human fetal lung tissue labelling SOX2 with unpurified <u>ab92494</u>.

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (**ab92494**).

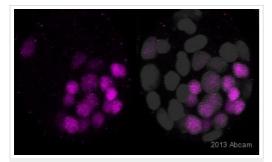
Perform heat mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol.



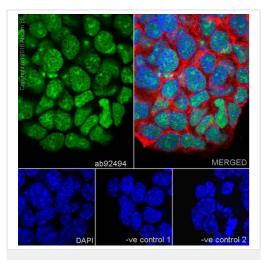
Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-SOX2 antibody [EPR3131] - BSA and Azide free (ab215970) Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) analysis of human embryonal carcinoma tissue labelling SOX2 with unpurified <u>ab92494</u>.

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (<u>ab92494</u>).

Perform heat mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol.



IHC - Wholemount - Anti-SOX2 antibody [EPR3131] - BSA and Azide free (ab215970) This image is courtesy of an anonymous Abreview. IHC - Wholemount analysis of mouse blastocyst labelling SOX2 (pink) with unpurified <u>ab92494</u> at 1/200. The sample was incubated with the primary antibody for 48 hours at 4°C. Nuclei stained with DAPI (grey).



Immunocytochemistry/ Immunofluorescence - Anti-SOX2 antibody [EPR3131] - BSA and Azide free (ab215970)

This ICC data was generated using the same anti-SOX2 antibody clone, EPR3131, in a different buffer formulation (cat# **ab92494**).

Cell line: F9 (mouse embryonal carcinoma)

Target AbID: Ab92494 anti-Sox2, Ab150077 AlexaFluor®488 Goat anti-Rabbit secondary

Counterstain AbID: Ab7291 anti-Tubulin (Mouse mAb), Ab150120 AlexaFluor®594 Goat anti-Mouse secondary

Fixative: 4% PFA

Permeabilisation: 0.1% Triton-X

Nuclear counter stain: DAPI

Comments: Confocal image showing negative staining on F9 cells

Target primary antibody dilution: 1:200

Target secondary antibody dilution: 1:1000 (2ug/mL)

Counterstain primary antibody dilution: 1:1000 (1ug/mL)

Counterstain secondary antibody dilution: 1:1000 (2ug/mL)

Negative control 1 primary antibody dilution: 1:200 (1ug/mL) (Ab92494)

Negative control 1 secondary antibody dilution: 1:1000 (2ug/mL) (Ab150120)

Negative control 2 primary antibody dilution: 1:1000 (1ug/mL) (Ab7291)

Negative control 2 secondary antibody dilution: 1:1000 (2ug/mL) (Ab150077)

Why choose  $\alpha$ recombinant antibody? Research with Long-term and confidence scalable supply Consistent and Recombinant reproducible results technology Success from the Ethical standards first experiment compliant Confirmed Animal-free specificity production

Anti-SOX2 antibody [EPR3131] - BSA and Azide

free (ab215970)

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

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