abcam

Product datasheet

# Anti-SOX2 antibody [9-9-3] ab79351

★★★★★ 15 Abreviews 77 References 画像数 7

## 製品の概要

| | |
|---|---|
| **製品名** | Anti-SOX2 antibody [9-9-3] |
| **製品の詳細** | Mouse monoclonal [9-9-3] to SOX2 |
| **由来種** | Mouse |
| **アプリケーション** | **適用あり:** ICC/IF, WB, Flow Cyt (Intra) |
| **種交差性** | **交差種:** Mouse, Human, Apteronotus leptorhynchus<br>**交差が予測される動物種:** Rat, Sheep, Horse, Chicken, Cow, Pig, Xenopus laevis, Rhesus monkey |
| **免疫原** | Synthetic peptide corresponding to Human SOX2 aa 300 to the C-terminus (C terminal) conjugated to keyhole limpet haemocyanin.<br>(Peptide available as **ab80398**) |
| **ポジティブ・コントロール** | ICC/IF: NCCIT, mES and F9 cells. WB: F9 and PC-3 whole cell lysate. Flow Cyt (Intra): F9 cells. |
| **特記事項** | This antibody clone is manufactured by Abcam. If you require a custom buffer formulation or conjugation for your experiments, please contact **orders@abcam.com**.<br><br>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.<br><br>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 |

## 製品の特性

| | |
|---|---|
| **製品の状態** | Liquid |
| **保存方法** | Shipped at 4°C. Upon delivery aliquot and store at -20°C or -80°C. Avoid repeated freeze / thaw cycles. |
| **バッファー** | pH: 7.40<br>Preservative: 0.02% Sodium azide<br>Constituents: 6.97% L-Arginine, PBS |
| **精製度** | IgG fraction |

| | |
|---|---|
| **ポリ/モノ** | モノクローナル |
| **クローン名** | 9-9-3 |
| **アイソタイプ** | IgG1 |

## アプリケーション

**The Abpromise guarantee** Abpromise保証は、次のテスト済みアプリケーションにおけるab79351の使用に適用されます

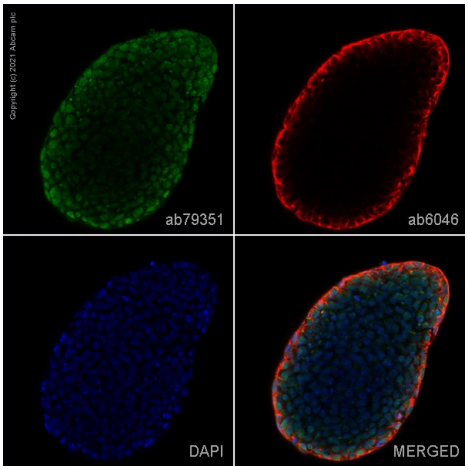
アプリケーションノートには、推奨の開始希釈率がありますが、適切な希釈率につきましてはご検討ください。

| アプリケーション | Abreviews | 特記事項 |
|---|---|---|
| **ICC/IF** | ★★★★★ (4) | 1/200. |
| **WB** | ★★★★★ (4) | Use a concentration of 1 µg/ml. Detects a band of approximately 43 kDa (predicted molecular weight: 34 kDa). |
| **Flow Cyt (Intra)** | | Use 0.1-1µg for $10^6$ cells.<br>**ab170190** - Mouse monoclonal IgG1, is suitable for use as an isotype control with this antibody. |

## 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

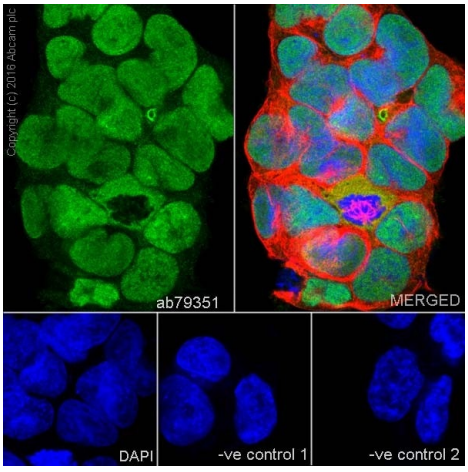



Immunocytochemistry/ Immunofluorescence - Anti-SOX2 antibody [9-9-3] (ab79351)

ab79351 staining SOX2 in mES cells. The cells were fixed with 100% methanol (5 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 ab79351 at 1µg/ml and **ab6046**, Rabbit polyclonal to beta Tubulin - Loading Control. Cells were then incubated with **ab150117**, Goat polyclonal Secondary Antibody to Mouse IgG H&L (Alexa Fluor® 488) preadsorbed at 1/1000 dilution (shown in green) and **ab150080**, Goat polyclonal Secondary Antibody to Rabbit IgG - H&L (Alexa Fluor® 594) at 1/1000 dilution (shown in pseudocolour red). Nuclear DNA was labelled with DAPI (shown in blue).

Also suitable in cells fixed with 4% paraformaldehyde (10 min).

Image was acquired with a confocal microscope (Leica-Microsystems TCS SP8) and a single confocal section is shown.




Immunocytochemistry/ Immunofluorescence - Anti-SOX2 antibody [9-9-3] (ab79351)

Immunofluorescent analysis of 4% PFA-fixed, 0.1% Triton X-100 permeabilized NCCIT (human pluripotent embryonal carcinoma) cells labeling SOX2 with ab79351 at 1/200 dilution, followed by **ab150113** AlexaFluor®488 Goat anti-Mouse secondary antibody at 1/1000 dilution (green). Confocal image showing showing positive staining on NCCIT cells. Counterstained with **ab179504** anti-Tubulin (Rabbit mAb, 1/1000), **ab150080** AlexaFluor®594 Goat anti-Rabbit secondary at a 1/1000 dilution. Nuclear stained with DAPI.
The negative controls are as follows:
-ve control 1: ab79351 at 1/200 dilution, followed by **ab150080** at 1/1000 dilution.
-ve control 2: **ab179504** at 1/1000 dilution, followed by **ab150113** at 1/1000 dilution.


Western blot - Anti-SOX2 antibody [9-9-3] (ab79351)

**All lanes :** Anti-SOX2 antibody [9-9-3] (ab79351) at 1/10000 dilution

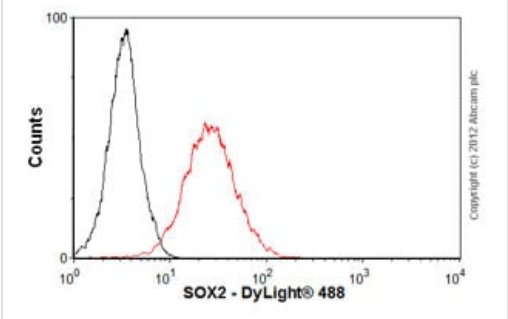
**Lane 1 :** NCCIT whole cell lysate
**Lane 2 :** PC-3 whole cell lysate

Lysates/proteins at 10 µg per lane.

**Secondary**
**All lanes :** Goat Anti-Rabbit IgG H&L (HRP) (**ab97051**) at 1/2000 dilution

**Predicted band size:** 34 kDa
**Observed band size:** 34 kDa

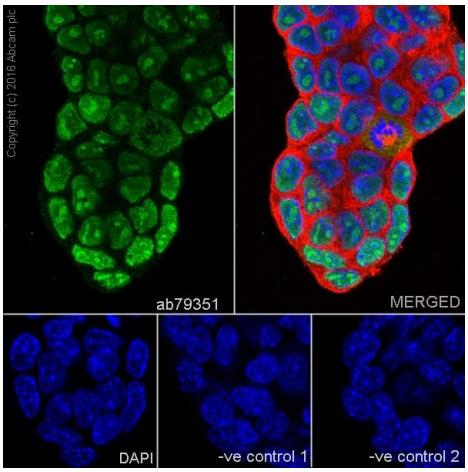
Blocking buffer: 5% NFDM/TBST
Dilution buffer: 5% NFDM/TBST




Flow Cytometry (Intracellular) - Anti-SOX2 antibody [9-9-3] (ab79351)

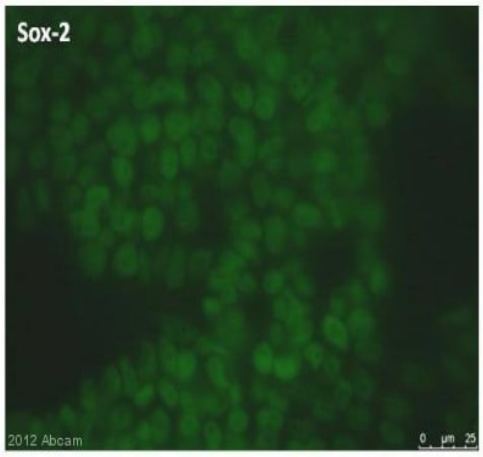
Overlay histogram showing F9 cells stained with ab79351 (red line). The cells were fixed with 4% paraformaldehyde (10 min) and incubated in 1x PBS / 10% normal goat serum / 0.3M glycine to block non-specific protein-protein interactions. The cells were then incubated with the antibody (ab79351, 1µg/1x$10^6$ cells) for 30 min at 22ºC. The secondary antibody used was a goat **anti-mouse DyLight® 488** (IgG H+L) (**ab96879**) at 1/500 dilution for 30 min at 22ºC. Isotype control antibody (black line) was mouse IgG1 [ICIGG1] (**ab91353**, 2µg/1x$10^6$ cells) used under the same conditions. Acquisition of >5,000 events was performed. This antibody gave a positive result in 80% methanol (5 min) fixed F9 cells used under the same conditions.

Please note that Abcam do not have any data for use of this antibody on non-fixed cells. We welcome any customer feedback.




Immunocytochemistry/ Immunofluorescence - Anti-SOX2 antibody [9-9-3] (ab79351)

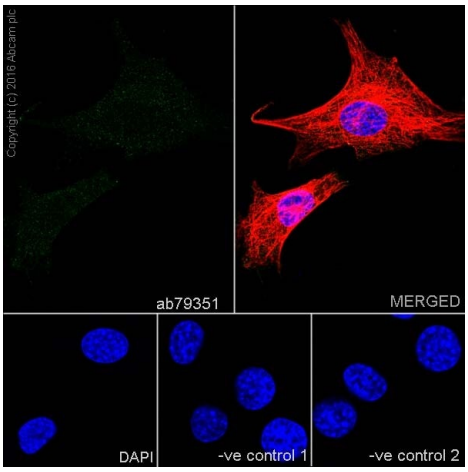
Immunofluorescent analysis of 4% PFA-fixed, 0.1% Triton X-100 permeabilized F9 (mouse embryonal carcinoma) cells labeling SOX2 with ab79351 at 1/200 dilution, followed by **ab150113** AlexaFluor®488 Goat anti-Mouse secondary antibody at 1/1000 dilution (green). Confocal image showing showing positive staining on F9 cells. Counterstained with **ab179504** anti-Tubulin (Rabbit mAb, 1/1000), **ab150080** AlexaFluor®594 Goat anti-Rabbit secondary at a 1/1000 dilution. Nuclear stained with DAPI.
The negative controls are as follows:
-ve control 1: ab79351 at 1/200 dilution, followed by **ab150080** at 1/1000 dilution.
-ve control 2: **ab179504** at 1/1000 dilution, followed by **ab150113** at 1/1000 dilution.




Immunocytochemistry/ Immunofluorescence - Anti-SOX2 antibody [9-9-3] (ab79351)

This image is courtesy of an abreview by Joe Segal.

ICC/IF image of ab79351 stained D3 mouse embryonic stem cells. The cells were fixed in 4% Paraformaldehyde, permeabilized using 0.1% Triton X-100, blocked with 1% Goat serum, 0.1% BSA in PBS for 30 minutes at RT, before incubation with ab79351 at a 1/100 dilution for 2 hours at RT. The secondary used was an Alexa Fluor 488 conjugated goat anti-mouse polyclonal, used at 1/200 dilution.




Immunocytochemistry/ Immunofluorescence - Anti-SOX2 antibody [9-9-3] (ab79351)

Immunofluorescent analysis of 4% PFA-fixed, 0.1% Triton X-100 permeabilized NIH/3T3 (mouse embryonic fibroblast cell line) **(Negative control)** cells labeling SOX2 with ab79351 at 1/200 dilution, followed by **ab150113** AlexaFluor®488 Goat anti-Mouse secondary antibody at 1/1000 dilution (green). Confocal image showing showing no staining on NIH/3T3 cells. Counterstained with **ab179504** anti-Tubulin (Rabbit mAb, 1/1000), **ab150080** AlexaFluor®594 Goat anti-Rabbit secondary at a 1/1000 dilution. Nuclear stained with DAPI.
The negative controls are as follows:
-ve control 1: ab79351 at 1/200 dilution, followed by **ab150080** at 1/1000 dilution.
-ve control 2: **ab179504** at 1/1000 dilution, followed by **ab150113** at 1/1000 dilution.

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