abcam

ab79351

Anti-SOX2 antibody [9-9-3]

Anti-SOX2 antibody [9-9-3] (ab79351) is a mouse monoclonal antibody detecting SOX2 in **Western Blot, Flow Cytometry (Intra), ICC/IF**. Suitable for **Apteronotus leptorhynchus, Human, Mouse**.

- Over 100 publications
- Trusted since 2010

Key facts

Isotype	IgG1
Host species	Mouse
Storage buffer	pH: 7.4 Preservative: 0.02% Sodium azide Constituents: PBS, 6.97% L-Arginine
Form	Liquid
Clonality	Monoclonal
Immunogen	The exact immunogen used to generate this antibody is proprietary information.
Clone number	9-9-3
Purity	IgG fraction
Concentration	1 mg/mL The concentration of this product may be batch-dependent Batch concentration finder →

Reactivity data

WB

Tested

Species	Human
Dilution info	1/1000

Notes	-

Expected

Species	Mouse
Dilution info	-
Notes	-

Species	Apteronotus leptorhynchus
Dilution info	1 µg/mL
Notes	-

Predicted

Species	Rat, Sheep, Horse, Chicken, Cow, Pig, Xenopus laevis, Rhesus monkey
Dilution info	-
Notes	-

ICC/IF

Tested

Species	Mouse
Dilution info	1/200
Notes	-

Species	Human
Dilution info	1/200
Notes	-

Expected

Species	Apteronotus leptorhynchus
Dilution info	1/200
Notes	-

Predicted

Species	Rat, Sheep, Horse, Chicken, Cow, Pig, Xenopus laevis, Rhesus monkey
Dilution info	-
Notes	-

Flow Cyt (Intra)

Tested

Species	Mouse
Dilution info	0.1-1 µg for 10^6 Cells
Notes	ab170190 - Mouse monoclonal IgG1, is suitable for use as an isotype control with this antibody.

Expected

Species	Human
Dilution info	-
Notes	-

Species	Apteronotus leptorhynchus
Dilution info	0.1-1 µg for 10^6 Cells
Notes	ab170190 - Mouse monoclonal IgG1, is suitable for use as an isotype control with this antibody.

Predicted

Species	Rat, Sheep, Horse, Chicken, Cow, Pig, Xenopus laevis, Rhesus monkey
Dilution info	-
Notes	-

Target data

See full target information SOX2

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). Binds to the proximal enhancer region of NANOG (By similarity). Critical for early embryogenesis and for embryonic stem cell pluripotency (PubMed:18035408). Downstream SRRT target that mediates the promotion of neural stem cell self-renewal (By similarity). Keeps neural cells undifferentiated by counteracting the activity of proneural proteins and suppresses neuronal differentiation (By similarity). May function as a switch in neuronal development (By similarity).

Storage

Shipped at conditions	Blue Ice
Appropriate short-term storage conditions	+4°C
Appropriate long-term storage conditions	-20°C
Aliquoting information	Upon delivery aliquot
Storage information	Avoid freeze / thaw cycle

Notes

What is this antibody validated in?
Anti-SOX2 antibody [9-9-3] (ab79351) is a mouse monoclonal antibody and is validated for use in Western Blot (WB), Flow Cytometry (Intra), Immunocytochemistry/immunofluorescence (ICC/IF) in Apteronotus leptorhynchus, Human, Mouse samples.

What is the molecular weight of SOX2?
Anti-SOX2 [9-9-3] (ab79351) specifically detects a band for SOX2 (UniProt: P48431) at a molecular weight of 34kDa.

Trusted by the scientific community
Anti-SOX2 [9-9-3] (ab79351) was first used in a scientific publication in 2010 and has been cited over 100 times in peer-reviewed journals.

Reviewed by scientists
Anti-SOX2 [9-9-3] (ab79351) has over 15 independent reviews from customers.

Other related products
We have a range of other formats of antibody clone [9-9-3] also available for your convenience: ab79351, Carrier free - ab264112

Want a custom formulation?
This antibody clone is manufactured by Abcam. If you require a custom buffer formulation or conjugation for your experiments, please contact orders@abcam.com

Product promise

Tested

We have tested this species and application combination and it works. It is covered by our product promise.

Expected

We have not tested this specific species and application combination in-house, but expect it will work. It is covered by our product promise.

Predicted

This species and application combination has not been tested, but we predict it will work based on strong homology. However, this combination is not covered by our product promise.

Not recommended

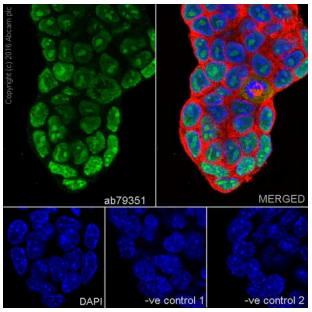
We do not recommend this combination. It is not covered by our product promise.

We are dedicated to supporting your work with high quality reagents and we are here for you every step of the way should you need us.

In the unlikely event of one of our products not working as expected, you are covered by our product promise.

Full details and terms and conditions can be found here:
Terms & Conditions.

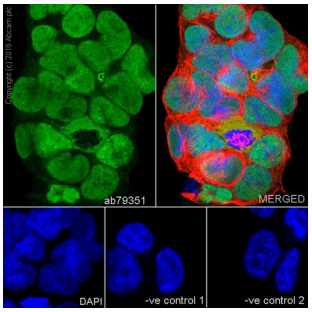
7 product images



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

SOX2 Immunocytochemistry/ Immunofluorescence staining using mouse Anti-SOX2 antibody

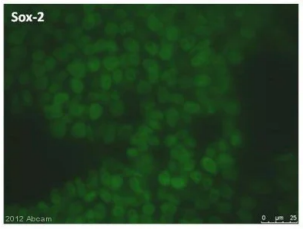
Immunofluorescent analysis of 4% PFA-fixed, 0.1% Triton X-100 permeabilized F9 (mouse embryonal carcinoma) cells labeling SOX2 with ab79351 at 1/200 dilution, followed by ab150113 AlexaFluor®488 Goat anti-Mouse secondary antibody at 1/1000 dilution (green). Confocal image showing showing positive staining 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)

SOX2 Immunocytochemistry/ Immunofluorescence staining using mouse Anti-SOX2 antibody

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.

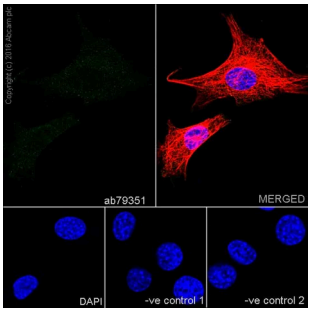


This image is courtesy of a customer review by Joe Segal.

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

SOX2 Immunocytochemistry/ Immunofluorescence staining using mouse Anti-SOX2 antibody

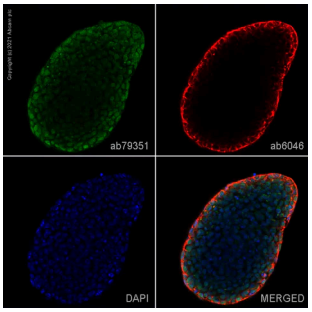
ICC/IF image of ab79351 stained D3 mouse embryonic stem cells. The cells were fixed in 4% Paraformaldehyde, permeabilized using 0.1% Triton X-100, blocked with 1% Goat serum, 0.1% BSA in PBS for 30 minutes at RT, before incubation with ab79351 at a 1/100 dilution for 2 hours at RT. The secondary used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



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

SOX2 Immunocytochemistry/ Immunofluorescence staining using mouse Anti-SOX2 antibody

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.



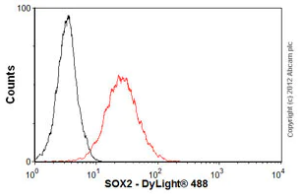
Immunocytochemistry/ Immunofluorescence - Anti-SOX2 antibody [9-9-3] (ab79351)

SOX2 Immunocytochemistry/ Immunofluorescence staining using mouse Anti-SOX2 antibody

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.

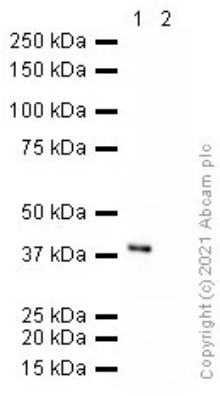


Flow Cytometry (Intracellular) - Anti-SOX2 antibody [9-9-3] (ab79351)

SOX2 Flow Cytometry (Intracellular) staining using mouse Anti-SOX2 antibody

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/1x10^6 cells) for 30 min at 22°C. The secondary antibody used was a goat anti-mouse DyLight® 488 (IgG H+L) (ab96879) at 1/500 dilution for 30 min at 22°C. Isotype control antibody (black line) was mouse IgG1 [ICIGG1] (ab91353, 2µg/1x10^6 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.



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

SOX2 Western blot staining using mouse Anti-SOX2 antibody

Blocking buffer: 5% NFDM/TBST
Dilution buffer: 5% NFDM/TBST
All lanes:
Western blot - Anti-SOX2 antibody [9-9-3] (ab79351) at 1/1000 dilution

Lane 1:
NCCIT (Human mediastinal epithelial pluripotent embryonal carcinoma cells) cell lysate at 10 µg

Lane 2:
PC-3 (Human prostate adenocarcinoma cells) cell lysate at 10 µg

Secondary

All lanes:
Goat polyclonal to Mouse IgG - H&L - Pre-Adsorbed (HRP) at 1/5000 dilution

Observed band size: 40 kDa

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.