abcam

ab224637

Anti-SOX17 antibody [EPR20684]

Anti-SOX17 antibody [EPR20684] (ab224637) is a rabbit monoclonal antibody detecting SOX17 in **Western Blot, IP, IHC-P, ICC/IF**. Suitable for **Human, Mouse, Rat**.

- KO validated for confirmed specificity
- Biophysical QC for unrivalled batch-batch consistency
- Over 10 publications

Recombinant | RabMAb | KO Validated | 20ul selling size

Key facts

Isotype	IgG
Host species	Rabbit
Storage buffer	pH: 7.2 - 7.4 Preservative: 0.01% Sodium azide Constituents: PBS, 40% Glycerol (glycerin, glycerine), 0.05% BSA
Form	Liquid
Clonality	Monoclonal
Immunogen	The exact immunogen used to generate this antibody is proprietary information.
Clone number	EPR20684
Purification technique	Affinity purification Protein A
Concentration	0.738 mg/mL The concentration of this product may be batch-dependent Batch concentration finder →

Reactivity data

ICC/IF

Tested

Species	Human
Dilution info	0.2 µg/mL
Notes	-

Expected

Species	Rat, Mouse
Dilution info	Use at an assay dependent concentration.
Notes	-

IP

Tested

Species	Human
Dilution info	1/30
Notes	-

Expected

Species	Rat, Mouse
Dilution info	Use at an assay dependent concentration.
Notes	-

WB

Tested

Species	Human
Dilution info	1/500
Notes	HeLa express low level of SOX17, it is easy to detect a negative signal in an ECL system. Protocol optimizations including increased protein loading (30-50 µg/lane), reduced primary antibody dilution (1/500), and fg-grade ECL substrates are suggested if HeLa must be tested.

Species	Rat
Dilution info	1/500

Notes	HeLa express low level of SOX17, it is easy to detect a negative signal in an ECL system. Protocol optimizations including increased protein loading (30-50 µg/lane), reduced primary antibody dilution (1/500), and fg-grade ECL substrates are suggested if HeLa must be tested.

Expected

Species	Mouse
Dilution info	Use at an assay dependent concentration.
Notes	-

IHC-P

Tested

Species	Mouse
Dilution info	1/2000
Notes	Perform heat-mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol.

Species	Rat
Dilution info	1/2000
Notes	Perform heat-mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol.

Species	Human
Dilution info	1/2000
Notes	Perform heat-mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol.

Target data

See full target information SOX17

Function	Acts as a transcription regulator that binds target promoter DNA and bends the DNA. Binds to the sequences 5'-AACAAT-'3 or 5'-AACAAAG-3'. Modulates transcriptional regulation via WNT3A. Inhibits Wnt signaling. Promotes degradation of activated CTNNB1. Plays a key role in the regulation of embryonic development. Required for normal development of the definitive gut endoderm. Required for normal looping of the embryonic heart tube. Plays an important role in embryonic and postnatal vascular development, including development of

arteries. Plays an important role in postnatal angiogenesis, where it is functionally redundant with SOX18. Required for the generation and maintenance of fetal hematopoietic stem cells, and for fetal hematopoiesis. Probable transcriptional activator in the premeiotic germ cells.

Storage

Shipped at conditions	Conditional Ambient
Appropriate short-term storage duration	1-2 weeks
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

Product Specifications
Anti-SOX17 antibody [EPR20684] (ab224637) was developed by Abcam using patented rabbit monoclonal antibody technology and is validated for use in ICC/IF, IHC-P, IP, WB in human, mouse, rat samples.
Anti-SOX17 antibody [EPR20684] (ab224637) specifically detects SOX17 (UniProt ID: Q9H6I2; Molecular weight: 44kDa) and is sold in 100 µL and 1 mL selling sizes.

Quality and Validation
Abcam's high quality manufacturing and validation processes ensure Anti-SOX17 antibody [EPR20684] (ab224637) has high sensitivity and specificity alongside high lot-to-lot consistency and reproducibility.
The specificity of Anti-SOX17 antibody [EPR20684] (ab224637) has been confirmed by testing in knockout samples.
Anti-SOX17 antibody [EPR20684] (ab224637) has been cited over 14 times in peer reviewed journals and is trusted by the scientific community.
Anti-SOX17 antibody [EPR20684] (ab224637) has 6 independent reviews from customers.

Related Products
Antibody clone EPR20684 is also available pre-conjugated to a variety of labels for your convenience - Alexa Fluor® 647, Alexa Fluor® 594, Alexa Fluor® 568, Alexa Fluor® 555, Alexa Fluor® 750 (ab311117, ab311745, ab313025, ab313227, ab321416).

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

What are the advantages of a recombinant monoclonal antibody?
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 batch production

For more information, read more on recombinant antibodies.

Shipping conditions update: ambient shipping
This product will be delivered at ambient temperature instead of chilled – this is by design. Extensive stability testing confirmed that our products are suitable for shipment under ambient conditions and maintain expected quality.

Why the change?

It's part of our commitment to more sustainable packaging solutions, with ambient deliveries using eco-friendly materials such as recyclable cardboard instead of polystyrene.

What you need to know

Ambient shipments come with a flyer explaining the below.
No ice will be included in ambient shipments, but mixed orders (ambient and cold-chain items) will still arrive with ice packs to protect temperature-sensitive products.
Warranty coverage remains fully valid, aligned with our validated shipping method.
Please store the product as per the datasheet instructions upon receipt.

Find out more - https://www.abcam.com/en-us/support/shipping-storage-support/ambient-shipping

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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

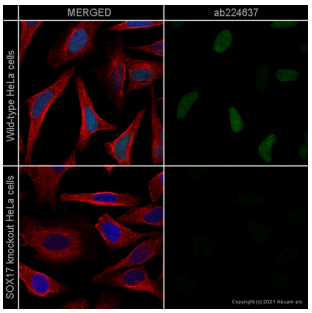
We do not recommend this combination. It is not covered by our product promise.

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.

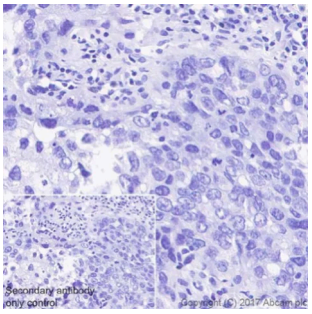
9 product images



Immunocytochemistry/ Immunofluorescence - Anti-SOX17 antibody [EPR20684] (ab224637)

SOX17 Immunocytochemistry/ Immunofluorescence staining using rabbit Anti-SOX17 antibody

ab224637 staining SOX17 in wild-type HeLa cells (top panel) and SOX17 knockout HeLa cells (ab265744) (bottom panel). The cells were fixed with 4% paraformaldehyde (10 min) then permeabilized with 0.1% 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 with ab224637 at 0.2µg/ml concentration and ab7291 (Mouse monoclonal to alpha Tubulin) at 1/1000 dilution overnight at 4°C followed by a further incubation at room temperature for 1h with a goat secondary antibody to rabbit IgG (Alexa Fluor® 488) (ab150081) at 2 µg/ml (shown in green) and a goat secondary antibody to mouse IgG (Alexa Fluor® 594) (ab150120) at 2 µg/ml (shown in red). Nuclear DNA was labelled in blue with DAPI.
Image was taken with a confocal microscope (Leica-Microsystems TCS SP8).

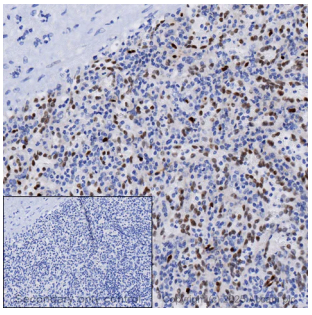


Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-SOX17 antibody [EPR20684] (ab224637)

SOX17 Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) staining using rabbit Anti-SOX17 antibody

Immunohistochemical analysis of paraffin-embedded human choriocarcinoma tissue labeling SOX17 with ab224637 at 1/2000 dilution, followed by Goat Anti-Rabbit IgG H&L (HRP) ready to use. **Negative tissue:** no staining on tumor cells of human choriocarcinoma (PMID: 19369635) is observed. Counter stained with Hematoxylin.
Secondary antibody only control: Used PBS instead of primary antibody, secondary antibody is Goat Anti-Rabbit IgG H&L (HRP) ready to use.

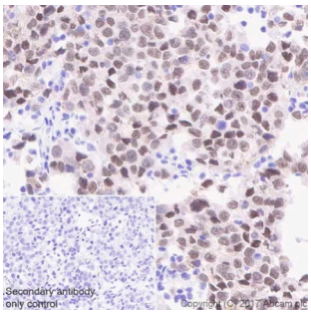
Perform heat mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-SOX17 antibody [EPR20684] (ab224637)

SOX17 Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) staining of Human spleen. using rabbit Anti-SOX17 antibody

Immunohistochemical analysis of formalin fixed paraffin embedded human spleen labelling SOX17 with ab224637 at a concentration of 0.5µg/ml. The immunostaining was performed on a Ventana DISCOVERY ULTRA (Roche Tissue Diagnostics) instrument with a OptiView DAB IHC Detection Kit. Heat mediated antigen retrieval was performed with DISCOVERY cell conditioning solution (CC1) 100°C, pH8.5 for 32mins. ab224637 anti-SOX17 antibody [EPR20684] was incubated for 16mins at 37°C. Sections were counterstained with Hematoxylin II. Image inset shows absence of staining in secondary antibody only control.
Customers are encouraged to optimise antigen retrieval conditions, antibody concentration, incubation times and temperature for best results in their own IHC assay workflow (automated and manual).

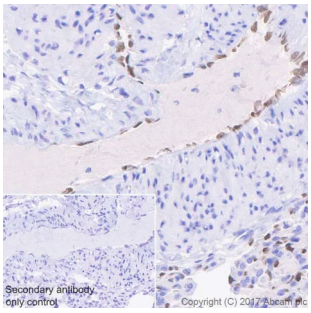


Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-SOX17 antibody [EPR20684] (ab224637)

SOX17 Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) staining using rabbit Anti-SOX17 antibody

Immunohistochemical analysis of paraffin-embedded human seminoma tissue labeling SOX17 with ab224637 at 1/2000 dilution, followed by Goat Anti-Rabbit IgG H&L (HRP) ready to use. Nuclear staining on tumor cells of human seminoma (PMID:19369635; PMID:18348160) is observed. Counter stained with Hematoxylin.
Secondary antibody only control: Used PBS instead of primary antibody, secondary antibody is Goat Anti-Rabbit IgG H&L (HRP) ready to use.

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

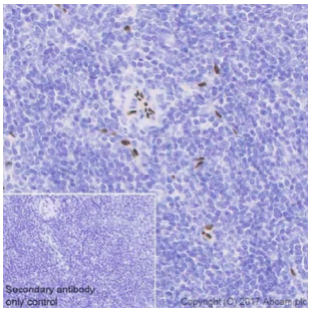


Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-SOX17 antibody [EPR20684] (ab224637)

SOX17 Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) staining using rabbit Anti-SOX17 antibody

Immunohistochemical analysis of paraffin-embedded rat lung tissue labeling SOX17 with ab224637 at 1/2000 dilution, followed by Goat Anti-Rabbit IgG H&L (HRP) ready to use. Nuclear staining on endothelium of rat lung (PMID:24418654) is observed. Counter stained with Hematoxylin.
Secondary antibody only control: Used PBS instead of primary antibody, secondary antibody is Goat Anti-Rabbit IgG H&L (HRP) ready to use.

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

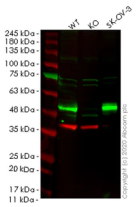


Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-SOX17 antibody [EPR20684] (ab224637)

SOX17 Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) staining using rabbit Anti-SOX17 antibody

Immunohistochemical analysis of paraffin-embedded mouse spleen tissue labeling SOX17 with ab224637 at 1/2000 dilution, followed by Goat Anti-Rabbit IgG H&L (HRP) ready to use. Nuclear staining on endothelium of mouse spleen (PMID:24418654) is observed. Counter stained with Hematoxylin.
Secondary antibody only control: Used PBS instead of primary antibody, secondary antibody is Goat Anti-Rabbit IgG H&L (HRP) ready to use.

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



Western blot - Anti-SOX17 antibody [EPR20684] (ab224637)

Lanes 1-3: Merged signal (red and green). Green - ab224637 observed at 51 kDa. Red - loading control ab8245 observed at 36 kDa.
ab224637 Anti-SOX17 antibody [EPR20684] was shown to specifically react with SOX17 in wild-type HeLa cells. Loss of signal was observed when knockout cell line ab265744 (knockout cell lysate ab257697) was used. Wild-type and SOX17 knockout samples were subjected to SDS-PAGE. ab224637 and Anti-GAPDH antibody [6C5] - Loading Control (ab8245) were incubated at room temperature for 2.5 hours at 1 in 1000 dilution and 1 in 20000 dilution respectively. Blots were developed with Goat anti-Rabbit IgG H&L (IRDye® 800CW) preadsorbed (ab216773) and Goat anti-Mouse IgG H&L (IRDye® 680RD) preadsorbed (ab216776) secondary antibodies at 1 in 20000 dilution for 1 hour at room temperature before imaging.

All lanes:
Western blot - Anti-SOX17 antibody [EPR20684] (ab224637) at 1/1000 dilution

Lane 1:
Wild-type HeLa cell lysate at 20 µg

Lane 2:
SOX17 knockout HeLa cell lysate at 20 µg

Lane 2:
Western blot - Human SOX17 knockout HeLa cell line (ab265744)

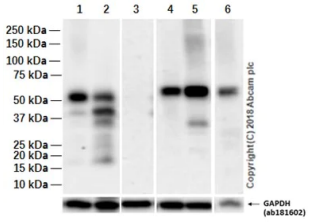
Lane 3:
SK-OV-3 cell lysate at 20 µg

Secondary

All lanes:
Western blot - Goat anti-Rabbit IgG H&L (IRDye® 800CW) preadsorbed (ab216773) at 1/10000 dilution

Predicted band size: 44 kDa

Observed band size: 51 kDa



Western blot - Anti-SOX17 antibody [EPR20684] (ab224637)

SOX17 Western blot staining using rabbit Anti-SOX17 antibody

Exposure time:
Lanes 1-2: 5 seconds
Lanes 3-6: 3 minutes
Blocking and diluting buffer and concentration: 5% NFDM/TBST.

The expression profile observed is consistent with the literature (PMID: 11786926).

Negative control: HeLa.

All lanes:
Western blot - Anti-SOX17 antibody [EPR20684] (ab224637) at 1/500 dilution

Lane 1:
SK-OV-3 (Human adenocarcinoma) whole cell lysates at 20 µg

Lane 2:
NIH: OVCAR-3 (Human ovary adenocarcinoma) whole cell lysates at 20 µg

Lane 3:
HeLa (Human cervix adenocarcinoma) whole cell lysates at 20 µg

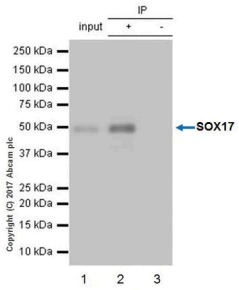
Lane 4:
Rat E14 embryo tissue lysates at 20 µg

Lane 5:
Rat E9.5 embryo tissue lysates at 20 µg

Lane 6:
Rat lung tissue lysates at 20 µg

Secondary

All lanes:
Goat Anti-Rabbit IgG (HRP), specific to the non-reduced form of IgG) at 1/2000 dilution



Immunoprecipitation - Anti-SOX17 antibody [EPR20684] (ab224637)

SOX17 was immunoprecipitated from 0.35 mg of SK-OV-3 (human ovarian cancer cell line) lysate with ab224637 at 1/30 dilution. Western blot was performed from the immunoprecipitate using ab224637 at 1/500 dilution. VeriBlot for IP Detection Reagent (HRP) (ab131366), was used for detection at 1/1000 dilution.
Lane 1: SK-OV-3 whole cell lysate 10 µg (Input).

Lane 2: ab224637 IP in SK-OV-3 whole cell lysate.

Lane 3: Rabbit monoclonal IgG (ab172730) instead of ab224637 in SK-OV-3 whole cell lysate.

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

Exposure time: 1 second.

All lanes:
Immunoprecipitation - Anti-SOX17 antibody [EPR20684] (ab224637)

Predicted band size: 44 kDa