abcam

ab218522

Anti-SOX10 antibody [SOX10/991]

Anti-SOX10 antibody [SOX10/991] (ab218522) is a mouse monoclonal antibody detecting SOX10 in **Western Blot, Flow Cytometry (Intra), IP, IHC-P, ICC/IF**. Suitable for **Human, Mouse, Rat**.

- Recombinant format for unrivalled batch-batch consistency

Recombinant

Key facts

Isotype	IgG2b
Host species	Mouse
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	Recombinant Fragment Protein within Human SOX10 aa 100-300. The exact immunogen used to generate this antibody is proprietary information. Database link P56693
Clone number	SOX10/991
Purification technique	Affinity purification Protein A
Light chain type	kappa
Concentration	1.048 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	-

Not recommended

Species	Mouse, Rat
Dilution info	-
Notes	-

IHC-P

Tested

Species	Human
Dilution info	1/1000
Notes	-

Species	Mouse
Dilution info	1/1000
Notes	-

Predicted

Species	Rat
Dilution info	-
Notes	-

ICC/IF

Tested

Species	Human
Dilution info	1/50
Notes	-

Not recommended

Species	Mouse, Rat
Dilution info	-
Notes	-

Flow Cyt (Intra)

Tested

Species	Human
Dilution info	1/1000
Notes	-

Not recommended

Species	Mouse, Rat
Dilution info	-
Notes	-

IP

Tested

Species	Human
Dilution info	1/30
Notes	-

Not recommended

Species	Mouse, Rat
Dilution info	-
Notes	-

Target data

See full target information SOX10

Function	Transcription factor that plays a central role in developing and mature glia (By similarity). Specifically activates expression of myelin genes, during oligodendrocyte (OL) maturation, such as DUSP15 and MYRF, thereby playing a central role in oligodendrocyte maturation and CNS myelination (By similarity). Once induced, MYRF cooperates with SOX10 to implement the myelination program (By similarity). Transcriptional activator of MITF, acting synergistically with PAX3 (PubMed:21965087). Transcriptional activator of MBP, via binding to the gene promoter (By similarity).

Storage

Shipped at conditions	Blue Ice
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

What is this antibody validated in?
Anti-SOX10 antibody [SOX10/991] (ab218522) is a mouse recombinant monoclonal antibody and is validated for use in Western Blot (WB), Flow Cytometry (Intra), Immunoprecipitation (IP), Immunohistochemistry (IHC-P), Immunocytochemistry/immunofluorescence (ICC/IF) in Human, Mouse, Rat samples.

What is the molecular weight of SOX10?
Anti-SOX10 [SOX10/991] (ab218522) specifically detects a band for SOX10 (UniProt: P56693) at a molecular weight of 49kDa.

Other related products
We have a range of other formats of antibody clone [SOX10/991] also available for your convenience: ab180862, Carrier free - ab220078, Alexa Fluor® 488 - ab311012, Alexa Fluor® 647 - ab311140, Alexa Fluor® 594 - ab311777, Alexa Fluor® 568 - ab313058, Alexa Fluor® 555 - ab313258, Alexa Fluor® 750 - ab321238, Carrier free - ab212843

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.

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

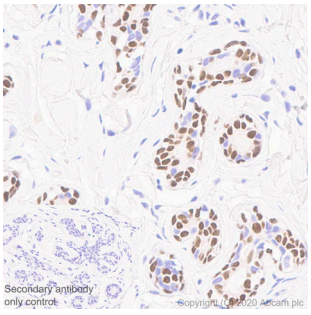
We do not recommend this combination. It is not covered by our product promise.

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



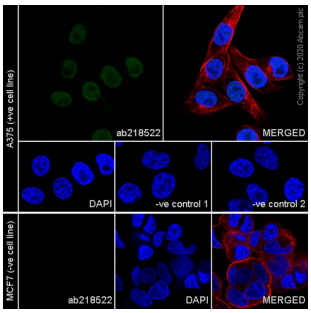
Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-SOX10 antibody [SOX10/991] (ab218522)

SOX10 Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) staining of Human breast tissue using mouse Anti-SOX10 antibody

Immunohistochemical analysis of paraffin-embedded Human breast tissue using ab218522 at a 1/1000 dilution followed by a ready to use secondary antibody Goat Anti-Mouse IgG H&L (HRP polymer) (ab214879).

Nuclear staining in human breast.
The section was incubated with ab218522 for 30 mins at room temperature.
The immunostaining was performed on a Leica Biosystems BOND® RX instrument
Hematoxylin was used as a counter stain.

Heat mediated antigen retrieval was performed with Citrate buffer (pH 6.0, Epitope Retrieval Solution 1) for 20 mins.

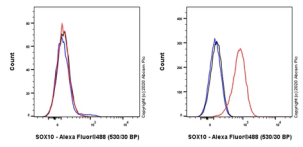


Immunocytochemistry/ Immunofluorescence - Anti-SOX10 antibody [SOX10/991] (ab218522)

SOX10 Immunocytochemistry/ Immunofluorescence staining using mouse Anti-SOX10 antibody

Immunofluorescent analysis of 4% Paraformaldehyde-fixed, 0.1% TritonX-100 permeabilized A375 (human malignant melanoma epithelial cell) cells labelling SOX10 with ab218522 at 1/50 dilution followed by secondary antibody ab150113 Goat Anti-Mouse IgG H&L (Alexa Fluor® 488) at 1/1000 dilution (green).

ab179513 Anti-beta Tubulin rabbit monoclonal antibody was used as a counterstain at a 1/200 dilution followed by a secondary antibody ab150080 Goat Anti-Rabbit IgG H&L (Alexa Fluor® 594) at a 1/1000 dilution (red).
Confocal image showing nuclear staining in A375 cells.
Negative control: MCF7 (PMID: 23799842).
Nuclear DNA was labelled with DAPI (shown in blue).

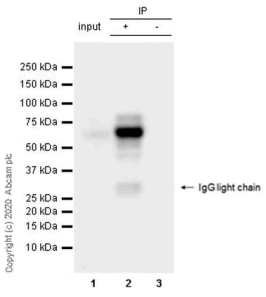


Flow Cytometry (Intracellular) - Anti-SOX10 antibody [SOX10/991] (ab218522)

SOX10 Flow Cytometry (Intracellular) staining using mouse Anti-SOX10 antibody

Flow cytometric analysis of 4% paraformaldehyde fixed, 90% methanol permeabilized MCF-7(Human breast adenocarcinoma epithelial cell, Left) / A375 (Human malignant melanoma epithelial cell, Right) cells labelling SOX10 with ab218522 at 1/1000 dilution (0.1µg)/Red followed by a Goat Anti-Mouse IgG (Alexa Fluor® 488, ab150113) at a 1/2000 dilution compared with a Mouse monoclonal IgG (Black) isotype control and unlabelled control Cell without incubation with primary antibody and secondary antibody / Blue.

Negative control: MCF7.(PMID: 23799842)



Immunoprecipitation - Anti-SOX10 antibody [SOX10/991] (ab218522)

SOX10 was immunoprecipitated from 0.35 mg A375 (human malignant melanoma epithelial cell) whole cell lysate with ab218522 at 1/30 dilution (2µg in 0.35mg lysates). Western blot was performed on the immunoprecipitate using ab218522 at 1/1000 dilution.

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

All lanes:
Immunoprecipitation - Anti-SOX10 antibody [SOX10/991] (ab218522) at 1/30 dilution

Lane 1:
A375 (human malignant melanoma epithelial cell) whole cell lysate (Input) at 10 µg

Lane 2:
A375 whole cell lysate (+)

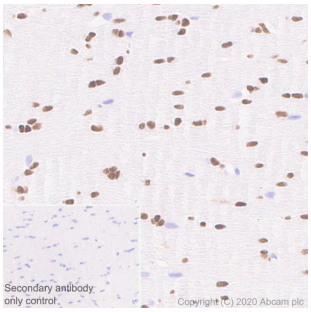
Lane 3:
Mouse IgG2b instead of ab218522 in A375 whole cell lysate (-)

Secondary

All lanes:
Immunoprecipitation - Anti-mouse IgG for IP (HRP) (ab131368) at 1/1000 dilution

Observed band size: 56-75 kDa

Exposure time: 3s



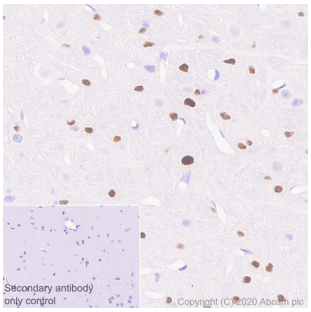
Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-SOX10 antibody [SOX10/991] (ab218522)

SOX10 Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) staining of Rat cerebrum tissue using mouse Anti-SOX10 antibody

Immunohistochemical analysis of paraffin-embedded Rat cerebrum tissue using ab218522 at a 1/2000 dilution followed by a ready to use secondary antibody Goat Anti-Mouse IgG H&L (HRP polymer) (ab214879).

Nuclear staining in rat cerebrum.
The section was incubated with ab218522 for 30 mins at room temperature.
The immunostaining was performed on a Leica Biosystems BOND® RX instrument
Hematoxylin was used as a counter stain.

Heat mediated antigen retrieval was performed with Citrate buffer (pH 6.0, Epitope Retrieval Solution 1) for 20 mins.



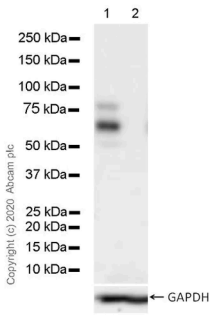
Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-SOX10 antibody [SOX10/991] (ab218522)

SOX10 Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) staining of Mouse cerebrum tissue using mouse Anti-SOX10 antibody

Immunohistochemical analysis of paraffin-embedded Mouse cerebrum tissue using ab218522 at a 1/2000 dilution followed by a ready to use secondary antibody Goat Anti-Mouse IgG H&L (HRP polymer) (ab214879).

Nuclear staining in mouse cerebrum.
The section was incubated with ab218522 for 30 mins at room temperature.
The immunostaining was performed on a Leica Biosystems BOND® RX instrument
Hematoxylin was used as a counter stain.

Heat mediated antigen retrieval was performed with Citrate buffer (pH 6.0, Epitope Retrieval Solution 1) for 20 mins.



Western blot - Anti-SOX10 antibody [SOX10/991] (ab218522)

SOX10 Western blot staining using mouse Anti-SOX10 antibody

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

Lysates should be made freshly and used in WB immediately to minimize protein degradation.
Negative control: MCF7 (PMID: 23799842).
The expression profile/ molecular weight observed is consistent with what has been described in the literature (PMID: 27115022, 29315345).
All lanes:
Western blot - Anti-SOX10 antibody [SOX10/991] (ab218522) at 1/1000 dilution

Lane 1:
A375 (human malignant melanoma epithelial cell), whole cell lysate at 10 µg

Lane 2:
MCF7 (human breast adenocarcinoma epithelial cell), whole cell lysate at 10 µg

Secondary

All lanes:
Peroxidase-Conjugated Goat anti-Mouse IgG (H+L) at 1/10000 dilution

Observed band size: 56-75 kDa

Exposure time: 26s

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