abcam

Product datasheet

Anti-SOX10 antibody [EPR4007-104] - BSA and Azide free ab220078

Recombinant RabMAb

8 Images

Overview

Product name	Anti-SOX10 antibody [EPR4007-104] - BSA and Azide free
Description	Rabbit monoclonal [EPR4007-104] to SOX10 - BSA and Azide free
Host species	Rabbit
Tested applications	**Suitable for:** IHC-FoFr, IHC-P **Unsuitable for:** ICC,IP or WB
Species reactivity	**Reacts with:** Mouse, Human
Immunogen	Synthetic peptide (the amino acid sequence is considered to be commercially sensitive) within Human SOX10 aa 400 to the C-terminus (Cysteine residue). The exact sequence is proprietary. Database link: P56693
Positive control	Human fetal brain tissue, mouse breast and cerebellum tissue IHC-Fr: Mouse and rat cerebellum tissue
General notes	ab220078 is the carrier-free version of ab180862 This format is designed for use in antibody labeling, including fluorochromes, metal isotopes, oligonucleotides, enzymes. Our carrier-free formats are supplied in a buffer free of BSA, sodium azide and glycerol for higher conjugation efficiency. Use our conjugation kits 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. Ab220078 is compatible with the Maxpar® Antibody Labeling Kit from Fluidigm. *Maxpar® is a trademark of Fluidigm Canada Inc.* Mouse: We have preliminary internal testing data to indicate this antibody may not react with these species. Please contact us for more information. Our RabMAb® technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to RabMAb® patents. Reproducibility is key to advancing scientific discovery and accelerating scientists' next breakthrough. Abcam is leading the way with our range of recombinant antibodies, knockout-validated

antibodies and knockout cell lines, all of which support improved reproducibility.

We are also planning to innovate the way in which we present recommended applications and species on our product datasheets, so that only applications & species that have been tested in our own labs, our suppliers or by selected trusted collaborators are covered by our Abpromise™ guarantee.

In preparation for this, we have started to update the applications & species that this product is Abpromise guaranteed for.

We are also updating the applications & species that this product has been "predicted to work with," however this information is not covered by our Abpromise guarantee.

Applications & species from publications and Abreviews that have not been tested in our own labs or in those of our suppliers are not covered by the Abpromise guarantee.

Please check that this product meets your needs before purchasing. 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, as well as customer reviews and Q&As.

Properties

Form	Liquid
Storage instructions	Shipped at 4°C. Store at +4°C. Do Not Freeze.
Storage buffer	pH: 7.20 Constituent: PBS
Carrier free	Yes
Purity	Protein A purified
Clonality	Monoclonal
Clone number	EPR4007-104
Isotype	IgG

Applications

Our Abpromise guarantee covers the use of **ab220078** in the following tested applications.

The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Application	Abreviews	Notes
IHC-FoFr		Use at an assay dependent concentration.
IHC-P		Use at an assay dependent concentration. Perform heat mediated antigen retrieval before commencing with IHC staining protocol.

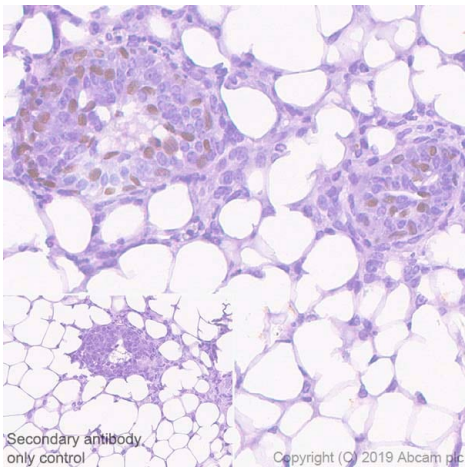
Application notes Is unsuitable for ICC,IP or WB.

Target

Function Transcription factor that seems to function synergistically with the POU domain protein TST-

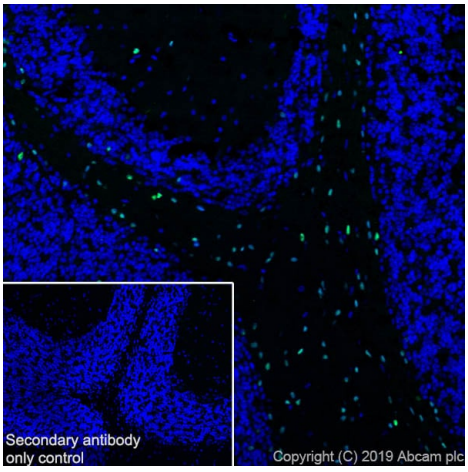
	1/OCT6/SCIP. Could confer cell specificity to the function of other transcription factors in developing and mature glia.
Tissue specificity	Expressed in fetal brain and in adult brain, heart, small intestine and colon.
Involvement in disease	Defects in SOX10 are the cause of Waardenburg syndrome type 2E (WS2E) [MIM:611584]. WS2 is a genetically heterogeneous, autosomal dominant disorder characterized by sensorineural deafness, pigmentary disturbances, and absence of dystopia canthorum. The frequency of deafness is higher in WS2 than in WS1. Defects in SOX10 are a cause of Waardenburg syndrome type 4C (WS4C) [MIM:613266]; also known as Waardenburg-Shah syndrome. WS4C is characterized by the association of Waardenburg features (depigmentation and deafness) and the absence of enteric ganglia in the distal part of the intestine (Hirschsprung disease). Defects in SOX10 are a cause of Yemenite deaf-blind hypopigmentation syndrome (YDBHS) [MIM:601706]. YDBHS consists of cutaneous hypopigmented and hyperpigmented spots and patches, microcornea, coloboma and severe hearing loss. Another case observed in a girl with similar skin symptoms and hearing loss but without microcornea or coloboma is reported as a mild form of this syndrome. Defects in SOX10 are the cause of peripheral demyelinating neuropathy, central dysmyelinating leukodystrophy, Waardenburg syndrome, and Hirschsprung disease (PCWH) [MIM:609136]; also called neurologic variant of Waardenburg-Shah syndrome. PCWH is a rare, complex and more severe neurocristopathy that includes features of 4 distinct syndromes: peripheral demyelinating neuropathy, central dysmyelinating leukodystrophy, Waardenburg syndrome, and Hirschsprung disease.
Sequence similarities	Contains 1 HMG box DNA-binding domain.
Cellular localization	Cytoplasm. Nucleus.

Images



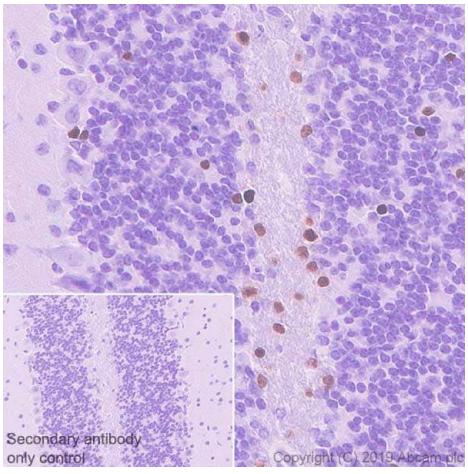
Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-SOX10 antibody [EPR4007-104] - BSA and Azide free (ab220078)

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) analysis of mouse breast tissue sections labeling SOX10 with purified ab180862 at 1/500 (0.22 µg/ml). Antigen retrieval was heat mediated with Tris-EDTA buffer (pH 9.0, epitope retrieval solution 2) for 20 minutes. Rabbit specific IHC polymer detection kit HRP/DAB (ab209101) was used as the secondary antibody. Hematoxylin was used as a counterstain.
This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (ab180862).



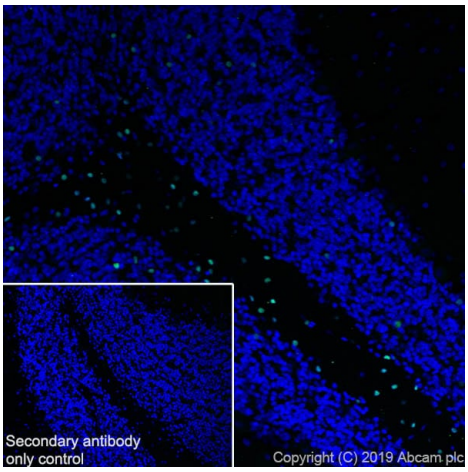
Immunohistochemistry (PFA perfusion fixed frozen sections) - Anti-SOX10 antibody [EPR4007-104] - BSA and Azide free (ab220078)

Immunohistochemistry (Frozen) analysis of mouse cerebellum tissue sections labeling SOX10 with purified ab180862 at 1/50 (2.2 µg/ml). Goat anti rabbit IgG (Alexa Fluor® 488, ab150077) at 1/1000 (2 µg/ml) was used as the secondary antibody. Sections were fixed with 4% paraformaldehyde and permeabilised with 0.2% Triton X-100. Negative control: PBS instead of the primary antibody. DAPI (blue) was used as nuclear counterstain. Heat mediated antigen retrieval using sodium citrate buffer (10mM citrate pH 6.0 + 0.05% Tween-20) was performed.
This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide ab180862).



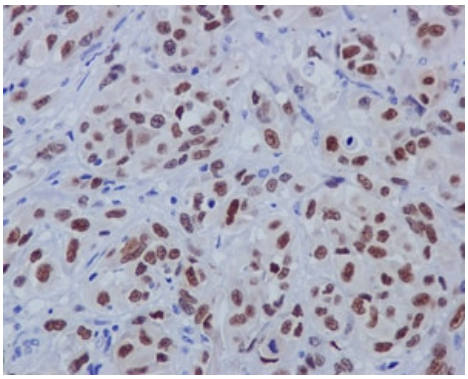
Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-SOX10 antibody [EPR4007-104] - BSA and Azide free (ab220078)

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) analysis of mouse cerebellum tissue sections labeling SOX10 with purified ab180862 at 1/500 (0.22 µg/ml). Antigen retrieval was heat mediated with Tris-EDTA buffer (pH 9.0, epitope retrieval solution 2) for 20 minutes. Rabbit specific IHC polymer detection kit HRP/DAB (ab209101) was used as the secondary antibody. Hematoxylin was used as a counterstain.
This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (ab180862).



Immunohistochemistry (PFA perfusion fixed frozen sections) - Anti-SOX10 antibody [EPR4007-104] - BSA and Azide free (ab220078)

Immunohistochemistry (Frozen) analysis of rat cerebellum tissue sections labeling SOX10 with purified ab180862 at 1/50 (2.2 µg/ml). Goat anti rabbit IgG (Alexa Fluor® 488, ab150077) at 1/1000 (2 µg/ml) was used as the secondary antibody. Sections were fixed with 4% paraformaldehyde and permeabilised with 0.2% Triton X-100. Negative control: PBS instead of the primary antibody. DAPI (blue) was used as nuclear counterstain. Heat mediated antigen retrieval using sodium citrate buffer (10mM citrate pH 6.0 + 0.05% Tween-20) was performed.
This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide ab180862).

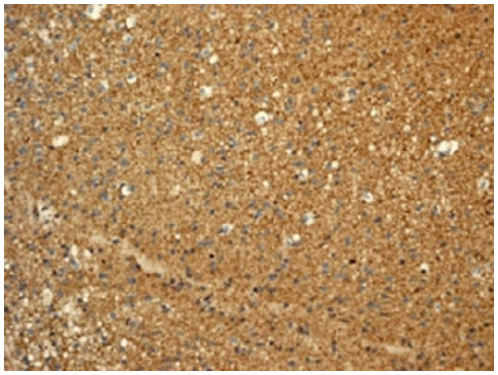


Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-SOX10 antibody [EPR4007-104] - BSA and Azide free (ab220078)

Immunohistochemical analysis of paraffin-embedded Human melanoma tissue labeling SOX10 with ab180862 at 1/100 dilution.

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (ab180862).

Heat mediated antigen retrieval was performed before commencing with IHC staining protocol.

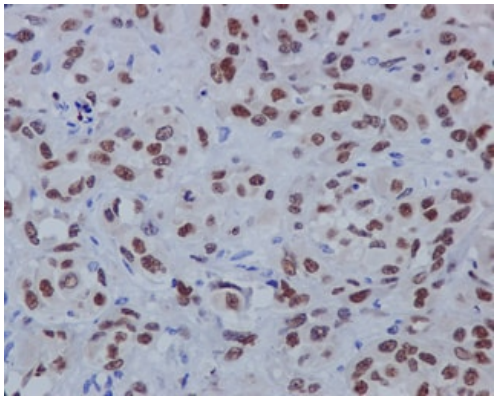


Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-SOX10 antibody [EPR4007-104] - BSA and Azide free (ab220078)

This IHC data was generated using the same anti-SOX10 antibody clone, EPR4007-104, in a different buffer formulation (cat# ab180862).

Immunohistochemical analysis of paraffin-embedded Human fetal brain tissue labeling SOX10 with ab180862 at 1/100 dilution.

Heat mediated antigen retrieval was performed before commencing with IHC staining protocol.

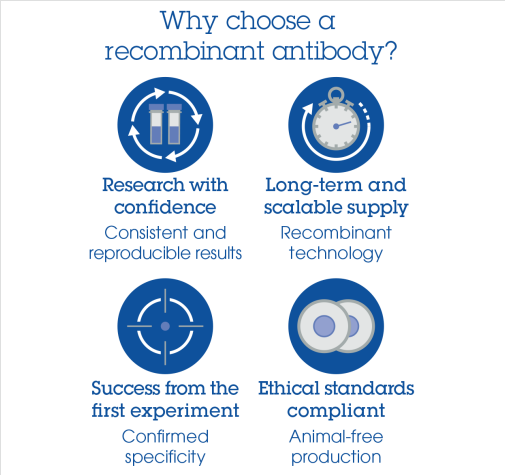


Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-SOX10 antibody [EPR4007-104] - BSA and Azide free (ab220078)

This IHC data was generated using the same anti-SOX10 antibody clone, EPR4007-104, in a different buffer formulation (cat# ab180862).

Immunohistochemical analysis of paraffin-embedded Human melanoma tissue labeling SOX10 with ab180862 at 1/100 dilution.

Heat mediated antigen retrieval was performed before commencing with IHC staining protocol.



Anti-SOX10 antibody [EPR4007-104] - BSA and Azide free (ab220078)

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

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