

Product datasheet

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

Recombinant RabMAb

★★★★☆ [3 Abreviews](#) [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-P, IHC-Fr Unsuitable for: ICC/IF, IP or WB
Species reactivity	Reacts with: Mouse, Rat, Human
Immunogen	Synthetic peptide. This information is proprietary to Abcam and/or its suppliers.
Positive control	Human fetal brain tissue, mouse breast and cerebellum tissue IHC-Fr: Mouse and rat cerebellum tissue
General notes	<p>ab220078 is the carrier-free version of ab180862.</p> <p>Our carrier-free antibodies are typically supplied in a PBS-only formulation, purified and free of BSA, sodium azide and glycerol. The carrier-free buffer and high concentration allow for increased conjugation efficiency.</p> <p>This conjugation-ready format is designed for use with fluorochromes, metal isotopes, oligonucleotides, and enzymes, which makes them ideal for antibody labelling, functional and cell-based assays, flow-based assays (e.g. mass cytometry) and Multiplex Imaging applications.</p> <p>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.</p> <p>This product is compatible with the Maxpar[®] Antibody Labeling Kit from Fluidigm, without the need for antibody preparation. Maxpar[®] is a trademark of Fluidigm Canada Inc.</p> <p>Our RabMAb[®] technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to RabMAb[®] patents.</p> <p>Mouse: We have preliminary internal testing data to indicate this antibody may not react with this species. Please contact us for more information.</p>

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

The Abpromise guarantee 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-P	★★★★★ (2)	Use at an assay dependent concentration. Perform heat mediated antigen retrieval before commencing with IHC staining protocol.
IHC-Fr	★★★★☆ (1)	Use at an assay dependent concentration.

Application notes Is unsuitable for ICC/IF,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]. WS2E 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.

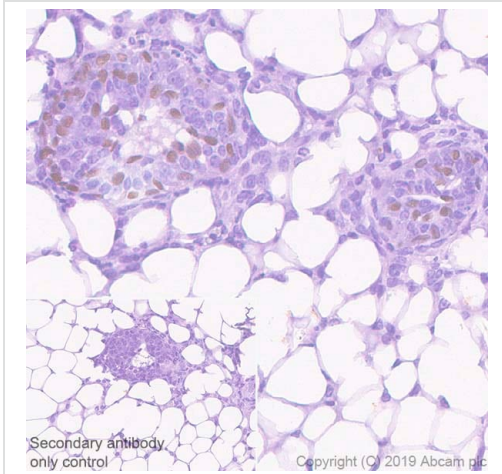
Sequence similarities

Contains 1 HMG box DNA-binding domain.

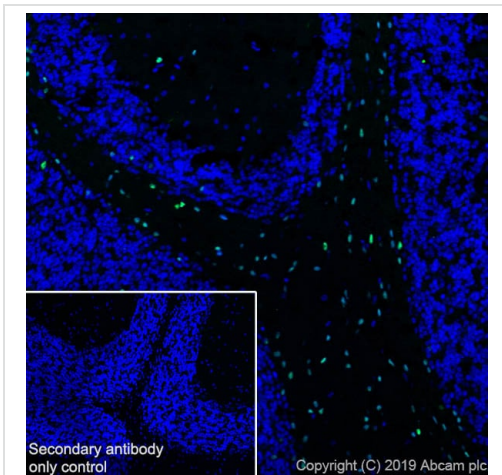
Cellular localization

Cytoplasm. Nucleus.

Images



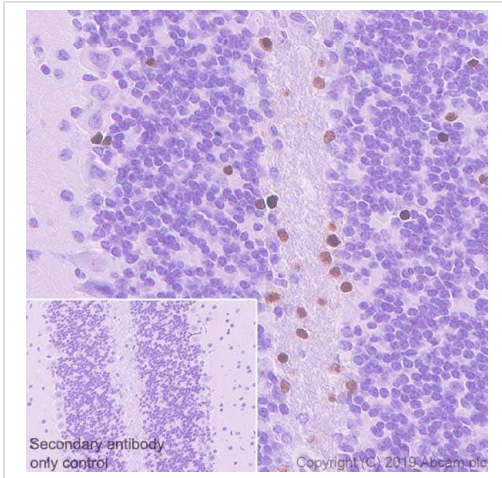
Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-SOX10 antibody [EPR4007-104] - BSA and Azide free (ab220078)



Immunohistochemistry (Frozen 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](#)).

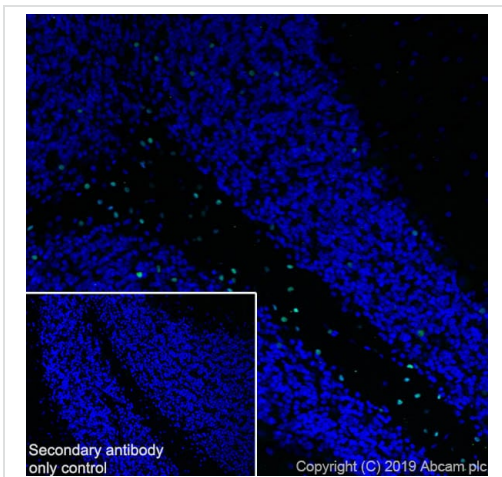
Immunohistochemistry (Frozen) analysis of mouse cerebellum tissue sections labeling SOX10 with purified [ab180862](#) at 1/50 (2.2 µg/ml). Goat anti rabbit IgG (Alexa Fluor® 488, [ab150077](#)) at 1/1000 (2 µg/ml) was used as the secondary antibody. Sections were fixed with 4% paraformaldehyde and permeabilised 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) 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**).

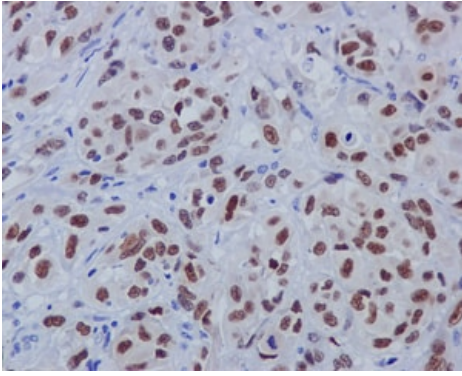
Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-SOX10 antibody [EPR4007-104] - BSA and Azide free (ab220078)



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

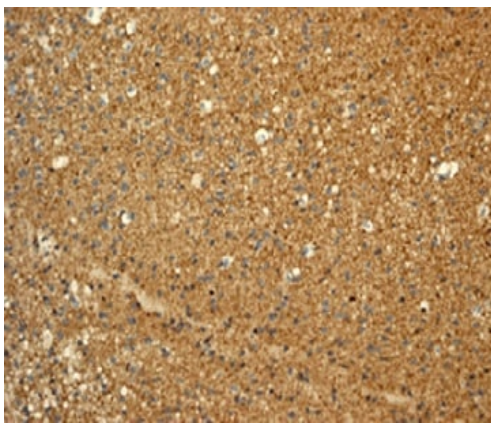


Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-SOX10 antibody [EPR4007-104] - BSA and Azide free (ab220078)

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.

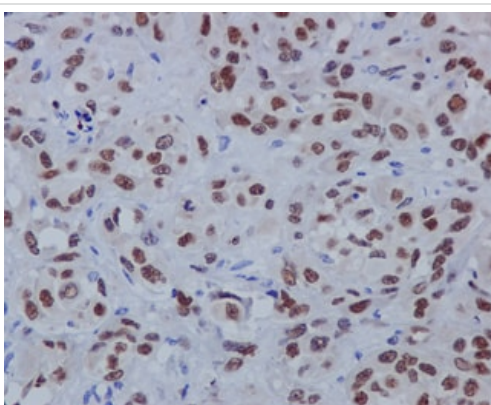


Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-SOX10 antibody [EPR4007-104] - BSA and Azide free (ab220078)

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.

Why choose a recombinant antibody?



Research with confidence
Consistent and reproducible results



Long-term and scalable supply
Recombinant technology



Success from the first experiment
Confirmed specificity



Ethical standards compliant
Animal-free production

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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