


Product datasheet

# Anti-SOX10 antibody [SP267] - BSA and Azide free ab245760

Recombinant RabMAb

9 Images

Overview

<b>Product name</b>	Anti-SOX10 antibody [SP267] - BSA and Azide free
<b>Description</b>	Rabbit monoclonal [SP267] to SOX10 - BSA and Azide free
<b>Host species</b>	Rabbit
<b>Tested applications</b>	<b>Suitable for:</b> Flow Cyt (Intra), ICC/IF, IHC-P, WB, IHC-FoFr
<b>Species reactivity</b>	<b>Reacts with:</b> Rat, Human <b>Predicted to work with:</b> Mouse, Chicken, Pig 
<b>Immunogen</b>	Synthetic peptide. This information is proprietary to Abcam and/or its suppliers.
<b>Positive control</b>	WB: A-375 cell lysate. IHC-P: Human melanoma tissue. Flow Cyt (intra): A375, C6, and B16-F0 cells. ICC/IF: A375, C6, and B16-F0 cells. IHC-Fr: Mouse cerebellum
<b>General notes</b>	ab245760 is the carrier-free version of <a href="#">ab227680</a> .

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.

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.

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.

This product is compatible with the Maxpar<sup>®</sup> Antibody Labeling Kit from Fluidigm, without the need for antibody preparation. Maxpar<sup>®</sup> is a trademark of Fluidigm Canada Inc.

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 production

For more information [see here](#).

Our RabMAb<sup>®</sup> technology is a patented hybridoma-based technology for making rabbit

monoclonal antibodies. For details on our patents, please refer to [RabMAb® patents](#).

**This product is FOR RESEARCH USE ONLY. For commercial use, please contact [partnerships@abcam.com](mailto:partnerships@abcam.com).**

## Properties

<b>Form</b>	Liquid
<b>Storage instructions</b>	Shipped at 4°C. Store at +4°C. Do Not Freeze.
<b>Storage buffer</b>	pH: 7.20 Constituent: PBS
<b>Carrier free</b>	Yes
<b>Purity</b>	Protein A/G purified
<b>Purification notes</b>	Purified from TCS by protein A/G.
<b>Clonality</b>	Monoclonal
<b>Clone number</b>	SP267
<b>Isotype</b>	IgG

## Applications

**The Abpromise guarantee** Our [Abpromise guarantee](#) covers the use of ab245760 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
Flow Cyt (Intra)		Use at an assay dependent concentration.
ICC/IF		Use at an assay dependent concentration.
IHC-P		Use at an assay dependent concentration. Perform heat mediated antigen retrieval with citrate buffer pH 6 before commencing with IHC staining protocol. Primary antibody incubation for 10 minutes at room temperature.
WB		Use at an assay dependent concentration. Predicted molecular weight: 49 kDa. Primary antibody incubation for 1 hour at room temperature.
IHC-FoFr		Use at an assay dependent concentration.

## 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.

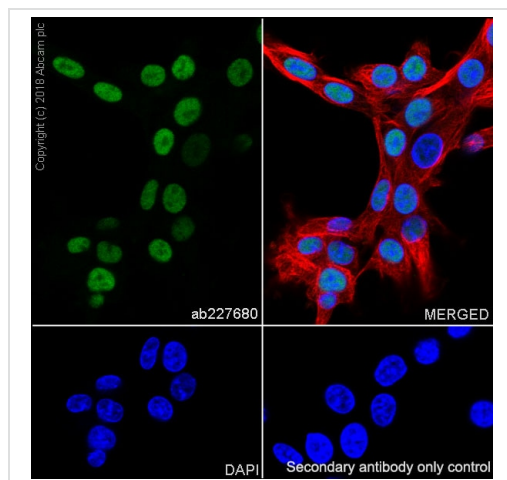
### Sequence similarities

Contains 1 HMG box DNA-binding domain.

### Cellular localization

Cytoplasm. Nucleus.

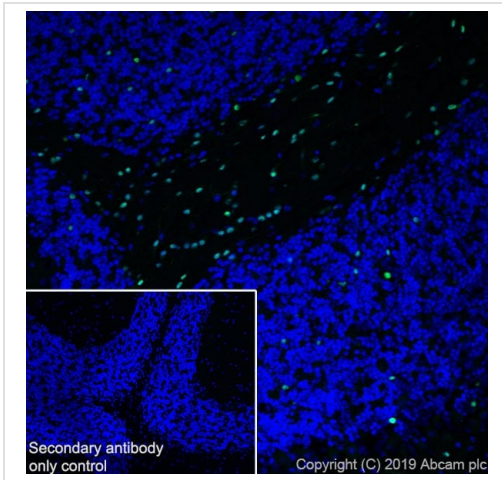
## Images



Immunocytochemistry/ Immunofluorescence - Anti-SOX10 antibody [SP267] - BSA and Azide free (ab245760)

Immunocytochemistry/ Immunofluorescence analysis of C6 (rat glial tumor glial cell) cells labeling SOX10 with purified [ab227680](#) at 1:25 (3 µg/ml). Cells were fixed in 4% paraformaldehyde and permeabilized with 0.1% Triton X-100. Cells were counterstained with Ab195889 Anti-alpha Tubulin antibody [DM1A] - Microtubule Marker (Alexa Fluor® 594) 1:200 (2.5 µg/ml). Goat anti rabbit IgG (Alexa Fluor® 488, [ab150077](#)) was used as the secondary antibody at 1:1000 (2 µg/ml) dilution. DAPI nuclear counterstain. PBS instead of the primary antibody was used as the secondary antibody only control.

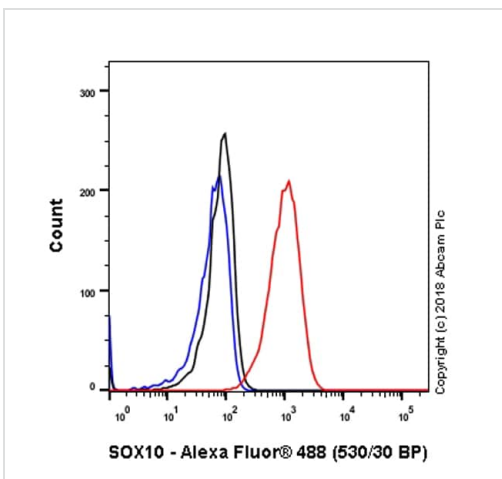
This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide ([ab227680](#)).



Immunohistochemistry (PFA perfusion fixed frozen sections) - Anti-SOX10 antibody [SP267] - BSA and Azide free (ab245760)

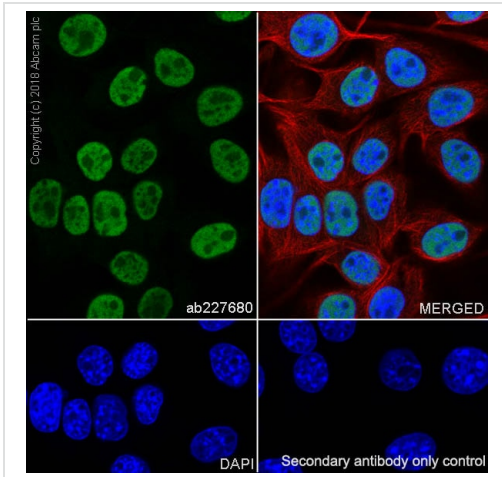
Immunohistochemistry (Frozen) analysis of mouse cerebellum tissue sections labeling SOX10 with purified [ab227680](#) at 1/50 (1.4 µg/ml). Goat anti rabbit IgG (Alexa Fluor® 488, [ab150077](#)) at 1/1000 (2 µg/ml) was used as the secondary antibody. Sections were fixed with 4% paraformaldehyde and permeabilised 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 [ab227680](#).



Flow Cytometry (Intracellular) - Anti-SOX10 antibody [SP267] - BSA and Azide free (ab245760)

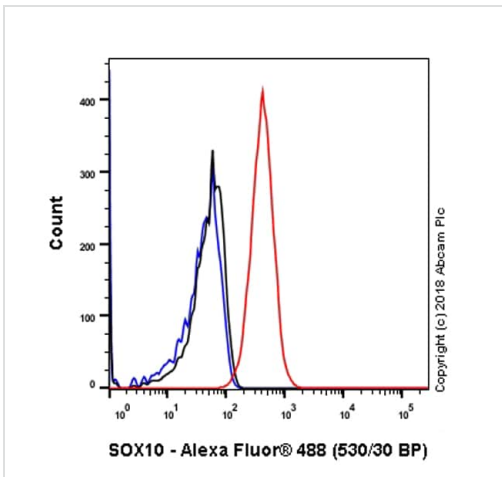
Intracellular Flow Cytometry analysis of C6 (Rat glial tumor glial cell) cells labeling SOX10 with purified [ab227680](#) at 1/20 dilution (3.75 µg/ml) Red. Cells were fixed with 4% paraformaldehyde. A Goat anti rabbit IgG (Alexa Fluor® 488, [ab150077](#)) secondary antibody was used at 1/2000 dilution. Isotype control - Rabbit monoclonal IgG ([ab172730](#)) / Black. Unlabeled control - Unlabelled cells / Blue. This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide ([ab227680](#)).



Immunocytochemistry/ Immunofluorescence - Anti-SOX10 antibody [SP267] - BSA and Azide free (ab245760)

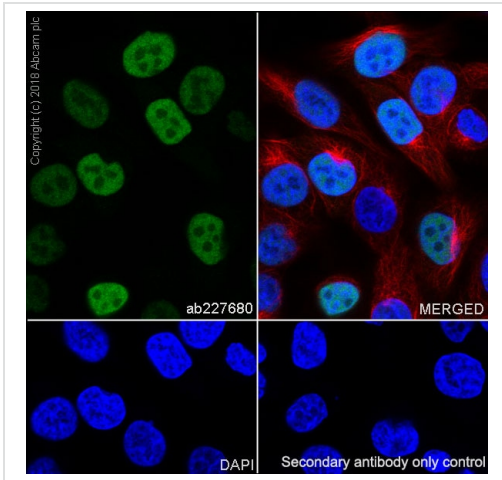
Immunocytochemistry/ Immunofluorescence analysis of B16-F0 (mouse melanoma epithelial cell-like) cells labeling SOX10 with purified [ab227680](#) at 1:25 (3 µg/ml). Cells were fixed in 4% paraformaldehyde and permeabilized with 0.1% Triton X-100. Cells were counterstained with Ab195889 Anti-alpha Tubulin antibody [DM1A] - Microtubule Marker (Alexa Fluor® 594) 1:200 (2.5 µg/ml). Goat anti rabbit IgG (Alexa Fluor® 488, [ab150077](#)) was used as the secondary antibody at 1:1000 (2 µg/ml) dilution. DAPI nuclear counterstain. PBS instead of the primary antibody was used as the secondary antibody only control.

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide ([ab130748](#)).



Flow Cytometry (Intracellular) - Anti-SOX10 antibody [SP267] - BSA and Azide free (ab245760)

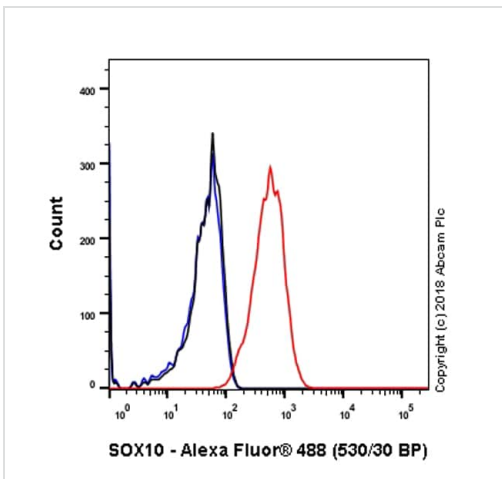
Intracellular Flow Cytometry analysis of B16-F0 (Mouse melanoma epithelial cell-like) cells labeling SOX10 with purified [ab227680](#) at 1/200 dilution (0.375µg/ml) Red. Cells were fixed with 4% paraformaldehyde . A Goat anti rabbit IgG (Alexa Fluor® 488, [ab150077](#)) secondary antibody was used at 1/2000 dilution. Isotype control - Rabbit monoclonal IgG ([ab172730](#)) / Black. Unlabeled control - Unlabelled cells / Blue. This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide ([ab227646](#)).



Immunocytochemistry/ Immunofluorescence - Anti-SOX10 antibody [SP267] - BSA and Azide free (ab245760)

Immunocytochemistry/ Immunofluorescence analysis of A-375 (human malignant melanoma epithelial cell) cells labeling SOX10 with purified [ab227680](#) at 1:25 (3 µg/ml). Cells were fixed in 4% paraformaldehyde and permeabilized with 0.1% Triton X-100. Cells were counterstained with Ab195889 Anti-alpha Tubulin antibody [DM1A] - Microtubule Marker (Alexa Fluor® 594) 1:200 (2.5 µg/ml). Goat anti rabbit IgG (Alexa Fluor® 488, [ab150077](#)) was used as the secondary antibody at 1:1000 (2 µg/ml) dilution. DAPI nuclear counterstain. PBS instead of the primary antibody was used as the secondary antibody only control.

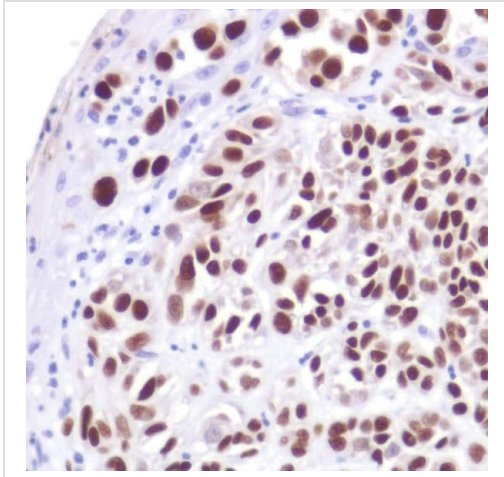
This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide ([ab227680](#)).



Flow Cytometry (Intracellular) - Anti-SOX10 antibody [SP267] - BSA and Azide free (ab245760)

Intracellular Flow Cytometry analysis of A-375 (Human malignant melanoma epithelial cell) cells labeling SOX10 with purified [ab227680](#) at 1/200 dilution (0.375 µg/ml) Red. Cells were fixed with 4% paraformaldehyde . A Goat anti rabbit IgG (Alexa Fluor® 488, [ab150077](#)) secondary antibody was used at 1/2000 dilution. Isotype control - Rabbit monoclonal IgG ([ab172730](#)) / Black. Unlabeled control - Unlabelled cells / Blue. This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide ([ab227680](#)).





Formalin-fixed, paraffin-embedded human melanoma tissue stained for SOX10 using [ab227680](#) at 1/100 dilution in immunohistochemical analysis.

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA and sodium azide ([ab227680](#)).

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-SOX10 antibody [SP267] - BSA and Azide free (ab245760)

### Why choose a recombinant antibody?

 <p><b>Research with confidence</b> Consistent and reproducible results</p>	 <p><b>Long-term and scalable supply</b> Recombinant technology</p>
 <p><b>Success from the first experiment</b> Confirmed specificity</p>	 <p><b>Ethical standards compliant</b> Animal-free production</p>

Anti-SOX10 antibody [SP267] - BSA and Azide free (ab245760)

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

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