abcam

Product datasheet

Anti-SOX10 antibody [SP275] ab227684

Recombinant RabMAb

3 References 8 Images

Overview

Product name	Anti-SOX10 antibody [SP275]
Description	Rabbit monoclonal [SP275] to SOX10
Host species	Rabbit
Tested applications	**Suitable for:** WB, IHC-P, Flow Cyt (Intra), ICC/IF
Species reactivity	**Reacts with:** Human
Immunogen	Synthetic peptide. This information is proprietary to Abcam and/or its suppliers.
Positive control	IHC-P: Human melanoma, and breast tissue; WB: A-375 cell lysate; Flow Cyt (Intra): A-375 cells.
General notes	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**. **This product is FOR RESEARCH USE ONLY. For commercial use, please contact partnerships@abcam.com.**

Properties

Form	Liquid
Storage instructions	Shipped at 4°C. Store at +4°C short term (1-2 weeks). Upon delivery aliquot. Store at -20°C long term. Avoid freeze / thaw cycle.
Storage buffer	pH: 7.60 Preservative: 0.1% Sodium azide Constituents: PBS, 1% BSA
Purity	Protein A/G purified
Purification notes	Purified from TCS by protein A/G.
Clonality	Monoclonal
Clone number	SP275
Isotype	IgG

Applications

The Abpromise guarantee Our **Abpromise guarantee** covers the use of ab227684 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
WB		1/400. Predicted molecular weight: 50 kDa.
IHC-P		1/100. Perform heat mediated antigen retrieval with EDTA buffer pH 8.0 before commencing with IHC staining protocol.
Flow Cyt (Intra)		1/400.
ICC/IF		1/50.

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.

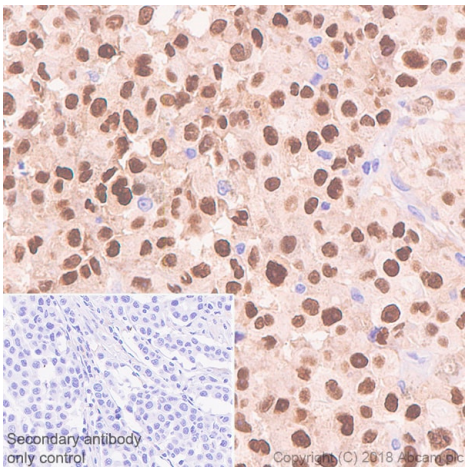
Tissue specificity Expressed in fetal brain and in adult brain, heart, small intestine and colon.

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.

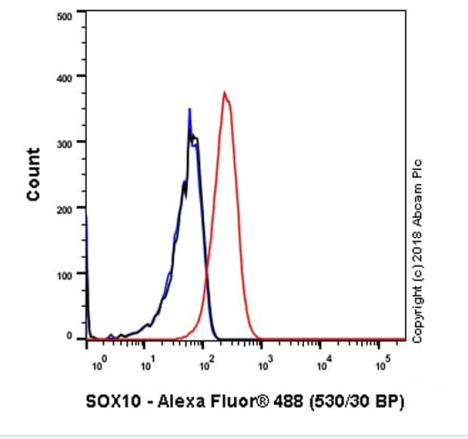
Cellular localization Cytoplasm. Nucleus.

Images



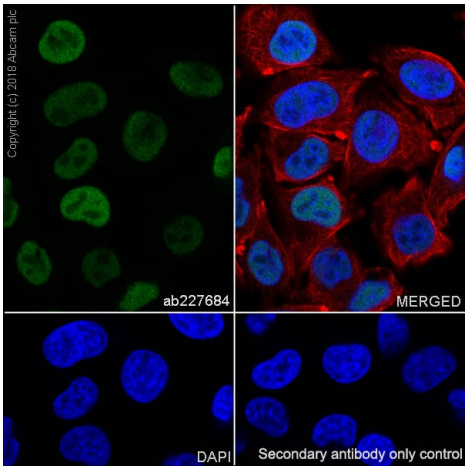
Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-SOX10 antibody [SP275] (ab227684)

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) analysis of Human melanoma tissue sections labeling SOX10 with ab227684 at 1/100 dilution (4.09 µg/ml). Heat mediated antigen retrieval was performed Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0, epitope retrieval solution 2) for 10 mins. Rabbit specific IHC polymer detection kit HRP/DAB (**ab209101**) was used as the secondary antibody. Negative control: PBS instead of the primary antibody. Hematoxylin was used as a counterstain.



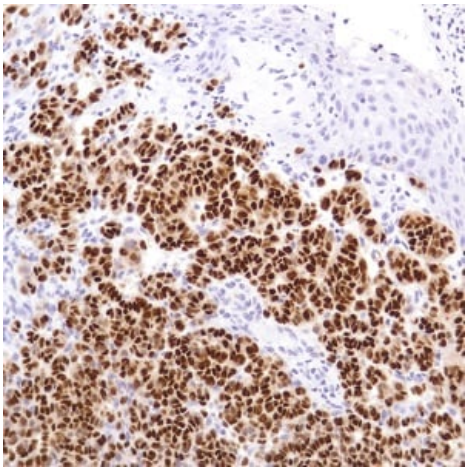
Flow Cytometry (Intracellular) - Anti-SOX10 antibody [SP275] (ab227684)

Flow Cytometry analysis of A375 (Human malignant melanoma epithelial cell) cells labeling SOX10 with purified ab227684 at 1:400 dilution (1.02 µg/ml) (red). Cells were fixed with 4% paraformaldehyde and permeabilised with 90% methanol. 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.



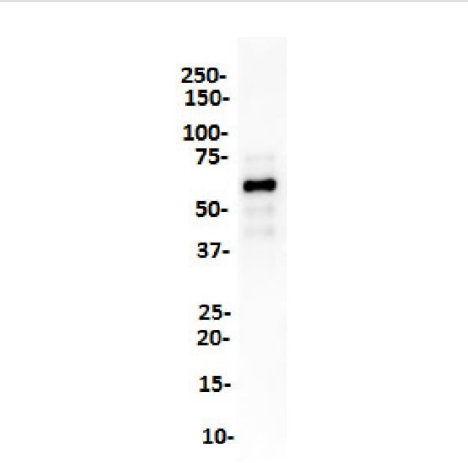
Immunocytochemistry/ Immunofluorescence - Anti-SOX10 antibody [SP275] (ab227684)

Immunocytochemistry/ Immunofluorescence analysis of A375 (human malignant melanoma epithelial cell) cells labeling SOX10 with purified ab227684 at 1:50 (8.1 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 (blue) was used as nuclear counterstain. PBS instead of the primary antibody was used as the secondary antibody only control.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-SOX10 antibody [SP275] (ab227684)

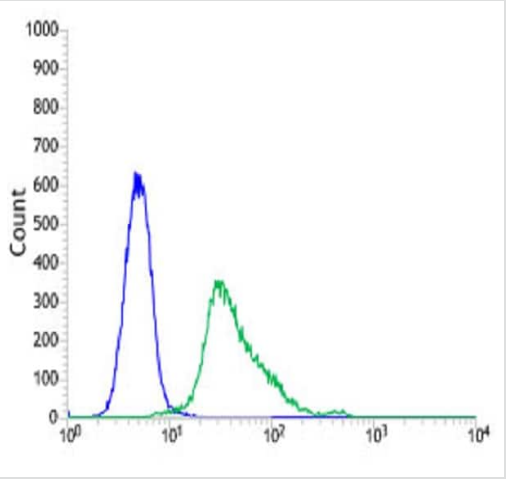
Formalin-fixed, paraffin-embedded human melanoma tissue stained for SOX10 using ab227684 at 1/100 dilution in immunohistochemical analysis.



Western blot - Anti-SOX10 antibody [SP275] (ab227684)

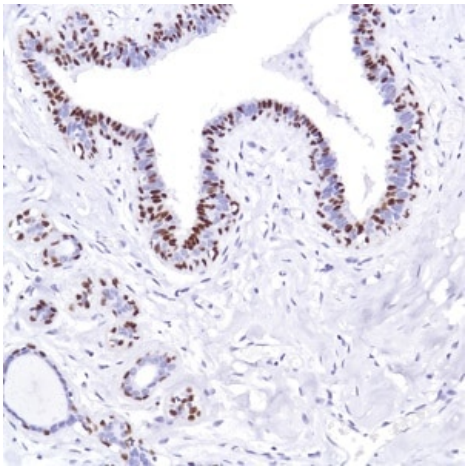
Anti-SOX10 antibody [SP275] (ab227684) at 1/400 dilution + A-375 (human malignant melanoma cell line) cell lysate

Predicted band size: 50 kDa



Flow Cytometry (Intracellular) - Anti-SOX10 antibody [SP275] (ab227684)

Flow Cytometry analysis of A-375 (human malignant melanoma cell line) cells labeling SOX10 with ab227684 at 1/400 dilution (green) compared to a Rabbit IgG negative control (blue).



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-SOX10 antibody [SP275] (ab227684)

Formalin-fixed, paraffin-embedded human breast tissue stained for SOX10 using ab227684 at 1/100 dilution in immunohistochemical analysis.

Anti-SOX10 antibody [SP275] (ab227684)

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

Our Abpromise to you: Quality guaranteed and expert technical support

- Replacement or refund for products not performing as stated on the datasheet
- Valid for 12 months from date of delivery
- Response to your inquiry within 24 hours
- We provide support in Chinese, English, French, German, Japanese and Spanish
- Extensive multi-media technical resources to help you
- We investigate all quality concerns to ensure our products perform to the highest standards

If the product does not perform as described on this datasheet, we will offer a refund or replacement. For full details of the Abpromise, please visit **https://www.abcam.com/abpromise** or contact our technical team.

Terms and conditions

- Guarantee only valid for products bought direct from Abcam or one of our authorized distributors