

Product datasheet

Anti-SOX10 antibody [SOX10/991] - BSA and Azide free ab212843

★★★★☆ 4 Abreviews 3 References 4 Images

Overview

Product name	Anti-SOX10 antibody [SOX10/991] - BSA and Azide free
Description	Mouse monoclonal [SOX10/991] to SOX10 - BSA and Azide free
Host species	Mouse
Tested applications	Suitable for: WB, IHC-P, Protein Array
Species reactivity	Reacts with: Mouse, Human Predicted to work with: Rat, Chicken, Pig 
Immunogen	Recombinant fragment (His-tag) aa 115-269. Sequence: AQAARR KLADQYPHLH NAELSKTLGK LWRLLNESDK RPFIEEAERL RMQHKKDHPD YKYQPRRRKN GKAAQGEAEC PGGEAEQGGT AAIQAHYKSA HLDHRHPGEG SPMSDGNPEH PSGQSHGPPT PPTTPKTELQ SGKADPKRDG RSMGEGGKP Database link: P56693  Run BLAST with  Run BLAST with
Positive control	WB: A375 cell lysate; Recombinant human SOX10 protein. IHC-P: Human melanoma and mouse brain tissue.
General notes	<p>Reproducibility is key to advancing scientific discovery and accelerating scientists' next breakthrough.</p> <p>Abcam is leading the way with our range of recombinant antibodies, knockout-validated antibodies and knockout cell lines, all of which support improved reproducibility.</p> <p>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.</p> <p>In preparation for this, we have started to update the applications & species that this product is Abpromise guaranteed for.</p> <p>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.</p>

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 short term (1-2 weeks). Upon delivery aliquot. Store at -20°C long term. Avoid freeze / thaw cycle.
Storage buffer	Constituent: 100% PBS
Carrier free	Yes
Purity	Protein A purified
Clonality	Monoclonal
Clone number	SOX10/991
Isotype	IgG2b
Light chain type	kappa

Applications

Our [Abpromise guarantee](#) covers the use of **ab212843** 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		Use a concentration of 0.5 - 1 µg/ml. Predicted molecular weight: 50 kDa.
IHC-P	★★★★★	Use a concentration of 0.5 - 1 µg/ml. Perform heat mediated antigen retrieval with citrate buffer pH 6 before commencing with IHC staining protocol. Boil tissue sections in 10mM citrate buffer, pH 6.0, for 10-20 min followed by cooling at RT for 20-30 minutes.
Protein Array		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

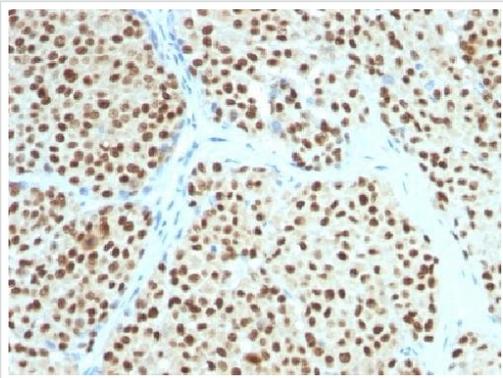


This data was produced with [ab218522](#), the same antibody in a different formulation with BSA and Azide.

[ab218522](#) was tested in protein array against over 19000 different full-length human proteins.

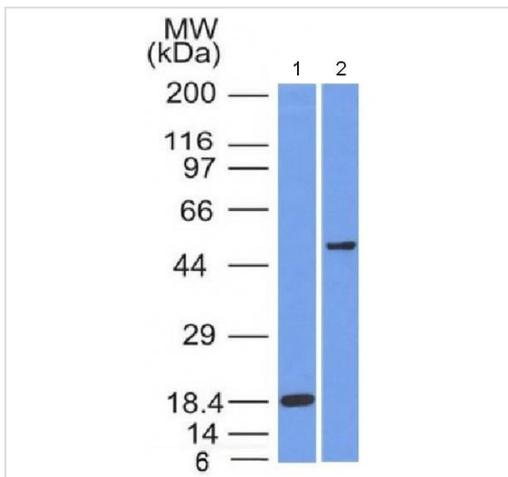
Z- and S- Score: The Z-score represents the strength of a signal that a monoclonal antibody (MAb) (in combination with a fluorescently-tagged anti-IgG secondary antibody) produces when binding to a particular protein on the HuProt™ array. Z-scores are described in units of standard deviations (SD's) above the mean value of all signals generated on that array. If targets on HuProt™ are arranged in descending order of the Z-score, the S-score is the difference (also in units of SD's) between the Z-score. S-score therefore represents the relative target specificity of a MAb to its intended target.

A MAb is specific to its intended target if the MAb has an S-score of at least 2.5. For example, if a MAb binds to protein X with a Z-score of 43 and to protein Y with a Z-score of 14, then the S-score for the binding of that MAb to protein X is equal to 29.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-SOX10 antibody [SOX10/991] - BSA and Azide free (ab212843)

Immunohistochemical analysis of formalin-fixed, paraffin-embedded human melanoma tissue labeling SOX10 with ab212843 at 1 µg/ml.



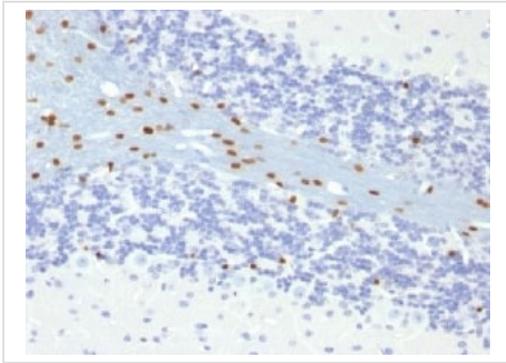
Western blot - Anti-SOX10 antibody [SOX10/991] - BSA and Azide free (ab212843)

All lanes : Anti-SOX10 antibody [SOX10/991] - BSA and Azide free (ab212843) at 1 µg/ml

Lane 1 : Recombinant fragment of Human SOX10

Lane 2 : A375 cell lysate

Predicted band size: 50 kDa



Formalin-fixed, paraffin-embedded mouse brain tissue stained for SOX10 using ab212843 at 1 ug/ml in immunohistochemical analysis.

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-SOX10 antibody [SOX10/991] - BSA and Azide free (ab212843)

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