

Product datasheet

Anti-SOX10 antibody [EPR4007] ab155279

Recombinant RabMAb

★★★★☆ 5 Abreviews 30 References 6 Images

Overview

| | |
|----------------------------|---|
| Product name | Anti-SOX10 antibody [EPR4007] |
| Description | Rabbit monoclonal [EPR4007] to SOX10 |
| Host species | Rabbit |
| Tested applications | Suitable for: ICC/IF, IHC-FoFr, WB, Flow Cyt |
| Species reactivity | Reacts with: Mouse, Rat, Human |
| Immunogen | corresponding to Human SOX10 aa 400 to the C-terminus. Database link: P56693 |
| Positive control | WB: Human brain, SH-SY5Y, A-375, C6, Mouse brain, Neuro-2a, and Rat brain lysates; ICC/IF: A-375 cells; Flow Cyt: A-375 cells. IHC-Fr: Mouse cerebellum |
| 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](#).

Our RabMAb[®] technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to [RabMAb[®] patents](#).

We are constantly working hard to ensure we provide our customers with best in class antibodies. As a result of this work we are pleased to now offer this antibody in purified format. We are in the process of updating our datasheets. The purified format is designated 'PUR' on our product labels. If you have any questions regarding this update, please contact our Scientific Support team.

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 | Preservative: 0.01% Sodium azide Constituents: 59% PBS, 40% Glycerol, 0.05% BSA |
| Purity | Protein A purified |
| Clonality | Monoclonal |
| Clone number | EPR4007 |
| Isotype | IgG |

Applications

Our [Abpromise guarantee](#) covers the use of **ab155279** 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 |
|-------------|-----------|--|
| ICC/IF | ★★★★★ | 1/500. For unpurified use at 1/250 - 1/500. |
| IHC-FoFr | ★☆☆☆☆ | 1/50. Perform heat mediated antigen retrieval using sodium citrate buffer (10mM citrate pH 6.0 + 0.05% Tween-20). |
| WB | | 1/1000 - 1/10000. Predicted molecular weight: 49 kDa. |
| Flow Cyt | ★★☆☆☆ | 1/200. |

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 | <p>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.</p> <p>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).</p> <p>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.</p> <p>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</p> |

severe neurocristopathy that includes features of 4 distinct syndromes: peripheral demyelinating neuropathy, central dysmyelinating leukodystrophy, Waardenburg syndrome, and Hirschsprung disease.

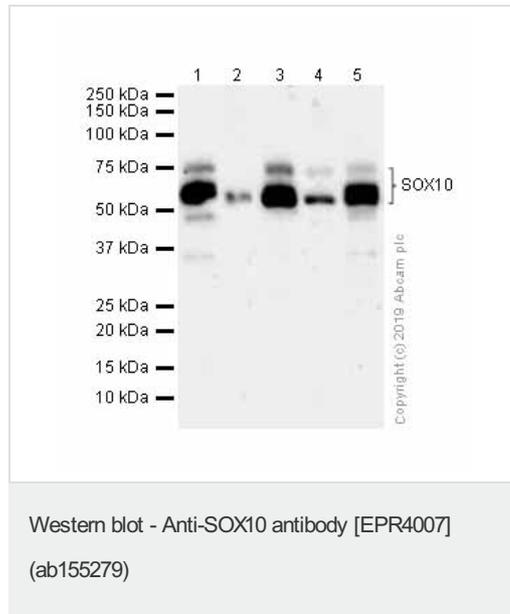
Sequence similarities

Contains 1 HMG box DNA-binding domain.

Cellular localization

Cytoplasm. Nucleus.

Images



All lanes : Anti-SOX10 antibody [EPR4007] (ab155279) at 1/1000 dilution (Purified)

Lane 1 : Human brain lysates

Lane 2 : SH-SY5Y (Human neuroblastoma epithelial cell) whole cell lysates

Lane 3 : Mouse brain lysates

Lane 4 : Neuro-2a (Mouse neuroblastoma neuroblast) whole cell lysates

Lane 5 : Rat brain lysates

Lysates/proteins at 20 µg per lane.

Secondary

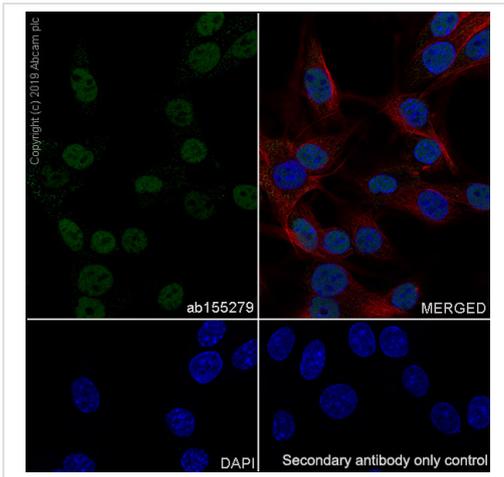
All lanes : Goat Anti-Rabbit IgG (HRP) with minimal cross-reactivity with human IgG at 1/2000 dilution

Predicted band size: 49 kDa

Observed band size: 56-75 kDa

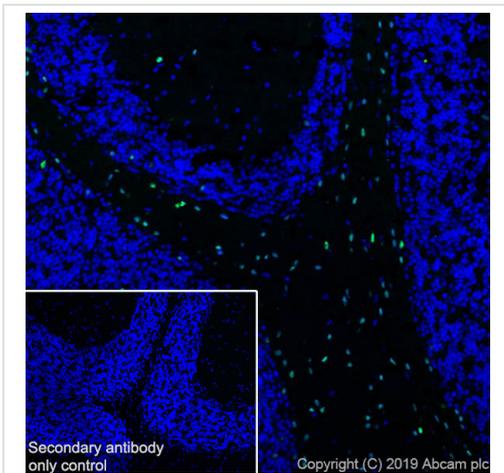
[why is the actual band size different from the predicted?](#)

The bands observed are consistent with what have been described in PMID: 21423190



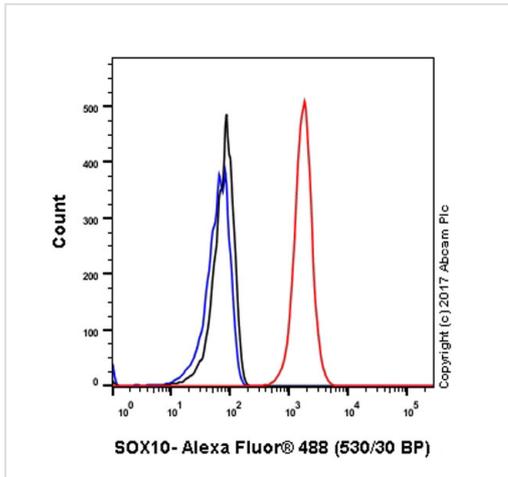
Immunocytochemistry/ Immunofluorescence - Anti-SOX10 antibody [EPR4007] (ab155279)

Immunocytochemistry/ Immunofluorescence analysis of C6 (Rat glial tumor glial cell) cells labeling SOX10 with purified ab155279 at 1:50 dilution (3.6 µg/ml). Cells were fixed in 4% Paraformaldehyde and permeabilized with 0.1% tritonX-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.



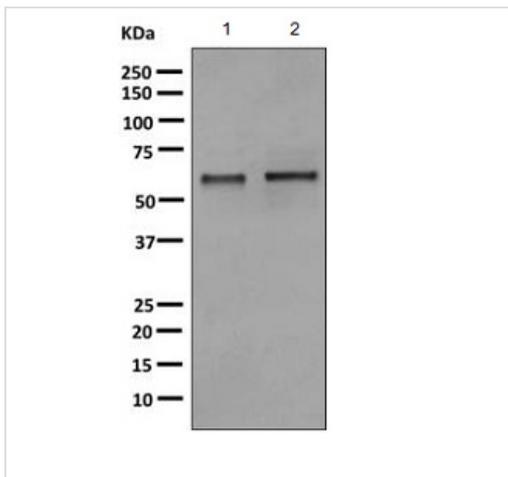
Immunohistochemistry (PFA perfusion fixed frozen sections) - Anti-SOX10 antibody [EPR4007] (ab155279)

Immunohistochemistry (Frozen) analysis of mouse cerebellum tissue sections labeling SOX10 with purified ab155279 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.



Flow cytometry analysis of A-375 (human malignant melanoma cell line) cells labeling with purified ab155279 at 1/200 dilution (1 µg/ml) (Red). Cells were fixed with 4% paraformaldehyde and permeabilised with 90% methanol. A Goat anti rabbit IgG (Alexa Fluor® 488)(ab150077) (1/2000 dilution) was used as the secondary antibody. Rabbit monoclonal IgG (Black)(ab172730) was used as a isotype control. Cell without incubation with primary antibody and secondary antibody (Blue) were used as unlabeled control.

Flow Cytometry - Anti-SOX10 antibody [EPR4007] (ab155279)



All lanes : Anti-SOX10 antibody [EPR4007] (ab155279) at 1/1000 dilution (unpurified)

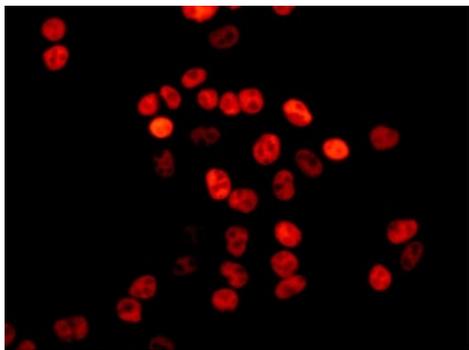
Lane 1 : A-375 (human malignant melanoma cell line) lysate

Lane 2 : C6 (rat glial tumor cell line) lysate

Lysates/proteins at 10 µg per lane.

Predicted band size: 49 kDa

Western blot - Anti-SOX10 antibody [EPR4007] (ab155279)



Immunofluorescent staining of A-375 (human malignant melanoma cell line) cells labeling SOX10 with ab155279 (unpurified) at a 1/250 dilution.

Immunocytochemistry/ Immunofluorescence - Anti-SOX10 antibody [EPR4007] (ab155279)

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