Anti-SOX1 Antibody [PSH10-51] - BSA and Azide free

HA751354

Product Type:	Recombinant Rabbit monoclonal IgG, primary antibodies
Species reactivity:	Human, Mouse, Rat, Cynomolgus monkey, Pig
Applications:	WB, IHC-Fr, IHC-P
Molecular Wt:	Predicted band size: 39 kDa
Clone number:	PSH10-51

Description: Sox genes comprise a family of genes that are related to the mammalian sex determining gene SRY. These genes similarly contain sequences that encode for the HMG-box domain, which is responsible for the sequence-specific DNA-binding activity. Sox genes encode putative transcriptional regulators implicated in the decision of cell fates during development and the control of diverse developmental processes. The highly complex group of Sox genes cluster at least 40 different loci that rapidly diverged in various animal lineages. At present, 30 Sox genes have been identified. Members of this family have been shown to be conserved during evolution and to play key roles during animal development. Some are involved in human diseases, including sex reversal.

Immunogen: Recombinant protein within Human SOX1 aa 1-391.

Positive control: Human cerebellum tissue, mouse cerebellum tissue, mouse E14.5 embryonic eyeball tissue, rat cerebellum tissue, rat E14.5 embryo tissue, NCCIT cell lysate, Mouse brain tissue lysate, Rat brain tissue lysate.

Subcellular location: Nucleus.

Database links: SwissProt: O00570 Human | P53783 Mouse

Storage Buffer: 1*PBS (pH7.4).

Storage Instruction: Store at 2-8℃. Avoid freeze.

Purity: Protein A affinity purified.

Images

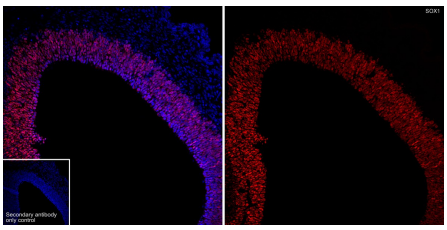


Fig1: This data was developed using HA723215, the same antibody clone in a different buffer formulation.
Application: IHC-Fr

Species: Mouse

Site: E14.5 embryonic brain

Sample: Frozen section

Antibody concentration: 1:500

Antigen retrieval: Not required

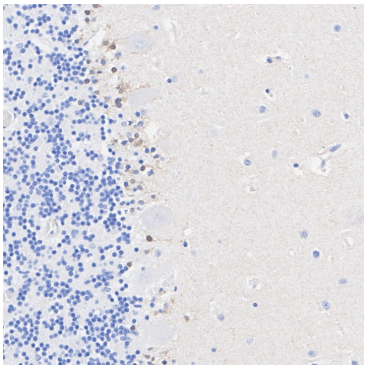


Fig2: This data was developed using HA723215, the same antibody clone in a different buffer formulation.
Immunohistochemical analysis of paraffin-embedded human cerebellum tissue with Rabbit anti-SOX1 antibody (HA723215) at 1/2,000 dilution.

The section was pre-treated using heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0) for 20 minutes. The tissues were blocked in 1% BSA for 20 minutes at room temperature, washed with ddH_2O and PBS, and then probed with the primary antibody (HA723215) at 1/2,000 dilution for 1 hour at room temperature. The detection was performed using an HRP conjugated compact polymer system. DAB was used as the chromogen. Tissues were counterstained with hematoxylin and mounted with DPX.

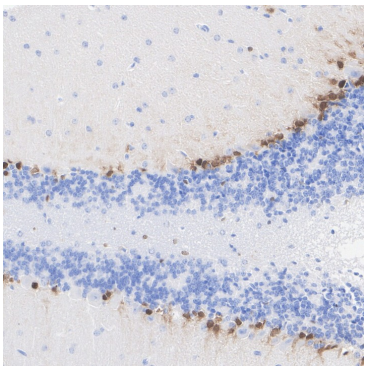


Fig3: This data was developed using HA723215, the same antibody clone in a different buffer formulation.
Immunohistochemical analysis of paraffin-embedded mouse cerebellum tissue with Rabbit anti-SOX1 antibody (HA723215) at 1/2,000 dilution.

The section was pre-treated using heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0) for 20 minutes. The tissues were blocked in 1% BSA for 20 minutes at room temperature, washed with ddH_2O and PBS, and then probed with the primary antibody (HA723215) at 1/2,000 dilution for 1 hour at room temperature. The detection was performed using an HRP conjugated compact polymer system. DAB was used as the chromogen. Tissues were counterstained with hematoxylin and mounted with DPX.

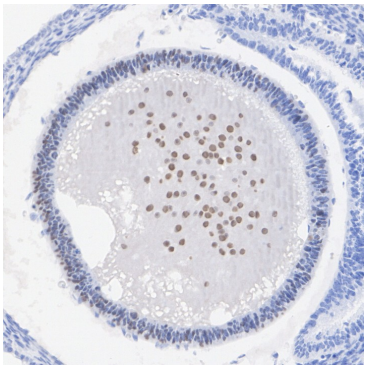


Fig4: This data was developed using HA723215, the same antibody clone in a different buffer formulation.
Immunohistochemical analysis of paraffin-embedded mouse E14.5 embryonic eyeball tissue with Rabbit anti-SOX1 antibody (HA723215) at 1/2,000 dilution.

The section was pre-treated using heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0) for 20 minutes. The tissues were blocked in 1% BSA for 20 minutes at room temperature, washed with ddH_2O and PBS, and then probed with the primary antibody (HA723215) at 1/2,000 dilution for 1 hour at room temperature. The detection was performed using an HRP conjugated compact polymer system. DAB was used as the chromogen. Tissues were counterstained with hematoxylin and mounted with DPX.

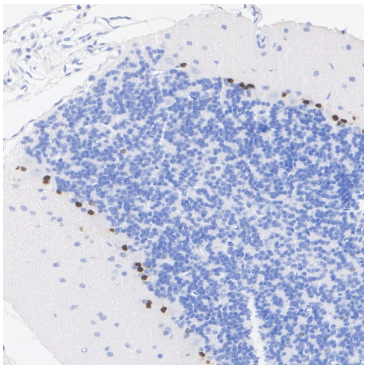


Fig5: This data was developed using HA723215, the same antibody clone in a different buffer formulation.
Immunohistochemical analysis of paraffin-embedded rat cerebellum tissue with Rabbit anti-SOX1 antibody (HA723215) at 1/2,000 dilution.

The section was pre-treated using heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0) for 20 minutes. The tissues were blocked in 1% BSA for 20 minutes at room temperature, washed with ddH_2O and PBS, and then probed with the primary antibody (HA723215) at 1/2,000 dilution for 1 hour at room temperature. The detection was performed using an HRP conjugated compact polymer system. DAB was used as the chromogen. Tissues were counterstained with hematoxylin and mounted with DPX.

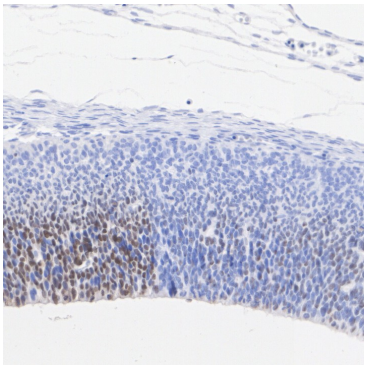


Fig6: This data was developed using HA723215, the same antibody clone in a different buffer formulation.
Immunohistochemical analysis of paraffin-embedded rat E14.5 embryo tissue with Rabbit anti-SOX1 antibody (HA723215) at 1/2,000 dilution.

The section was pre-treated using heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0) for 20 minutes. The tissues were blocked in 1% BSA for 20 minutes at room temperature, washed with ddH_2O and PBS, and then probed with the primary antibody (HA723215) at 1/2,000 dilution for 1 hour at room temperature. The detection was performed using an HRP conjugated compact polymer system. DAB was used as the chromogen. Tissues were counterstained with hematoxylin and mounted with DPX.

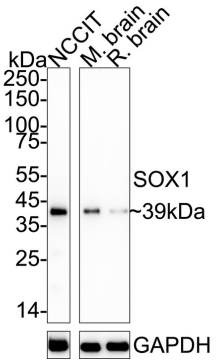


Fig7: This data was developed using HA723215, the same antibody clone in a different buffer formulation.
Western blot analysis of SOX1 on different lysates with Rabbit anti-SOX1 antibody (HA723215) at 1/2,000 dilution.

Lane 1: NCCIT cell lysate
Lane 2: Mouse brain tissue lysate
Lane 3: Rat brain tissue lysate

Lysates/proteins at 20 µg/Lane.

Predicted band size: 39 kDa
Observed band size: 39 kDa

Exposure time: 3 minutes; ECL: K1801;

4-20% SDS-PAGE gel.

Proteins were transferred to a PVDF membrane and blocked with 5% NFDM/TBST for 1 hour at room temperature. The primary antibody (HA723215) at 1/2,000 dilution was used in primary antibody dilution at 4℃ overnight. Goat Anti-Rabbit IgG - HRP Secondary Antibody (HA1001) at 1/50,000 dilution was used for 1 hour at room temperature.

Note: All products are "FOR RESEARCH USE ONLY AND ARE NOT INTENDED FOR DIAGNOSTIC OR THERAPEUTIC USE".

Background References

1. Sun X et al. Anti-SOX1 Antibodies in Paraneoplastic Neurological Syndrome. J Clin Neurol. 2020 Oct
2. Kanwore K et al. SOX1 Is a Backup Gene for Brain Neurons and Glioma Stem Cell Protection and Proliferation. Mol Neurobiol. 2021 Jun