Anti-SOX10 Antibody [SD204-04]

ET1612-79

Product Type:	Recombinant Rabbit monoclonal IgG, primary antibodies
Species reactivity:	Human, Mouse, Rat
Applications:	WB, IHC-P, IF-Tissue
Molecular Wt:	Predicted band size: 50 kDa
Clone number:	SD204-04

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: Synthetic peptide Human SOX10 aa 411-460 / 466.

Positive control: SK-MEL-28 cell lysate, B16-F1 cell lysate, A375 cell lysate, rat brain tissue lysate, rat brain tissue, human breast tissue, human skin tissue, mouse brain tissue, rat hippocampus tissue.

Subcellular location: Cytoplasm, Nucleus.

Database links: SwissProt: P56693 Human | Q04888 Mouse | O55170 Rat

Recommended Dilutions:

WB	1:5,000
IHC-P	1:50-1:800
IF-Tissue	1:50

Storage Buffer: 1*TBS (pH7.4), 0.05% BSA, 40% Glycerol. Preservative: 0.05% Sodium Azide.

Storage Instruction: Store at +4℃ after thawing. Aliquot store at -20℃ or -80℃. Avoid repeated freeze / thaw cycles.

Purity: Protein A affinity purified.

Images

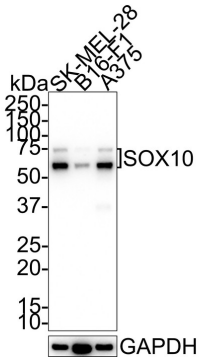

Fig1: Western blot analysis of SOX10 on different lysates with Rabbit anti-SOX10 antibody (ET1612-79) at 1/5,000 dilution.

Lane 1: SK-MEL-28 cell lysate
Lane 2: B16-F1 cell lysate
Lane 3: A375 cell lysate

Lysates/proteins at 15 µg/Lane.

Predicted band size: 50 kDa
Observed band size: 60/75 kDa

Exposure time: 1 minute 30 seconds;

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 (ET1612-79) at 1/5,000 dilution was used in 5% NFDM/TBST at 4℃ overnight. Goat Anti-Rabbit IgG - HRP Secondary Antibody (HA1001) at 1/50,000 dilution was used for 1 hour at room temperature.

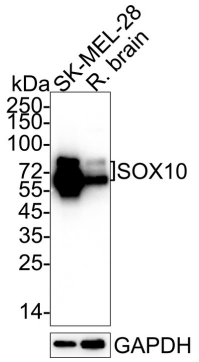

Fig2: Western blot analysis of SOX10 on different lysates with Rabbit anti-SOX10 antibody (ET1612-79) at 1/5,000 dilution.

Lane 1: SK-MEL-28 cell lysate (20 µg/Lane)
Lane 2: Rat brain tissue lysate (40 µg/Lane)

Predicted band size: 50 kDa
Observed band size: 60/75 kDa

Exposure time: 25 seconds; ECL: K1802;

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 (ET1612-79) at 1/5,000 dilution was used in 5% NFDM/TBST at 4℃ overnight. Goat Anti-Rabbit IgG - HRP Secondary Antibody (HA1001) at 1/50,000 dilution was used for 1 hour at room temperature.

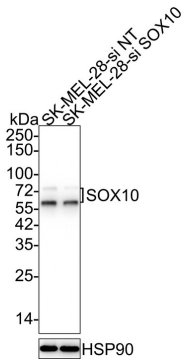

Fig3: Western blot analysis of SOX10 on different lysates with Rabbit anti-SOX10 antibody (ET1612-79) at 1/5,000 dilution.

Lane 1: SK-MEL-28-si NT cell lysate
Lane 2: SK-MEL-28-si SOX10 cell lysate

Lysates/proteins at 10 µg/Lane.

Predicted band size: 50 kDa
Observed band size: 60/75 kDa

Exposure time: 21 seconds;

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 (ET1612-79) at 1/5,000 dilution was used in 5% NFDM/TBST at 4℃ overnight. Goat Anti-Rabbit IgG - HRP Secondary Antibody (HA1001) at 1/50,000 dilution was used for 1 hour at room temperature.

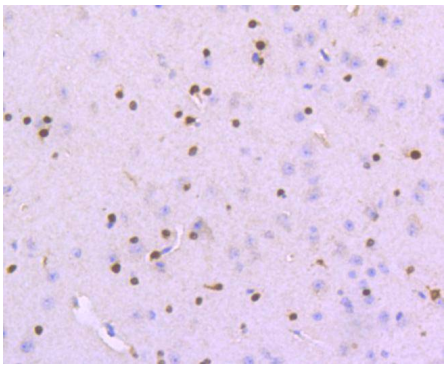

Fig4: Immunohistochemical analysis of paraffin-embedded mouse brain tissue using anti-SOX10 antibody. The section was pre-treated using heat mediated antigen retrieval with sodium citrate buffer (pH 6.0) for 20 minutes. The tissues were blocked in 5% BSA for 30 minutes at room temperature, washed with ddH_2O and PBS, and then probed with the primary antibody (ET1612-79, 1/50) for 30 minutes 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.

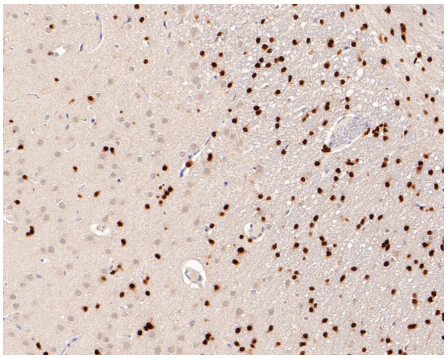

Fig5: Immunohistochemical analysis of paraffin-embedded rat brain tissue with Rabbit anti-SOX10 antibody (ET1612-79) at 1/800 dilution.

The section was pre-treated using heat mediated antigen retrieval with sodium citrate buffer (pH 6.0) for 2 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 (ET1612-79) at 1/800 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.

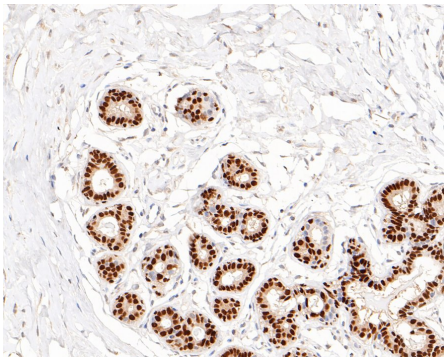

Fig6: Immunohistochemical analysis of paraffin-embedded human breast tissue with Rabbit anti-SOX10 antibody (ET1612-79) at 1/800 dilution.

The section was pre-treated using heat mediated antigen retrieval with sodium citrate buffer (pH 6.0) for 2 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 (ET1612-79) at 1/800 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.

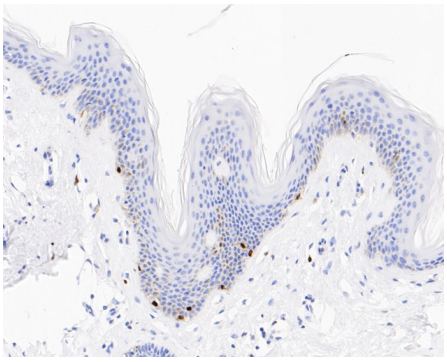

Fig7: Immunohistochemical analysis of paraffin-embedded human skin tissue using anti-SOX10 antibody. The section was pre-treated using heat mediated antigen retrieval with sodium citrate buffer (pH 6.0) for 20 minutes. The tissues were blocked in 5% BSA for 30 minutes at room temperature, washed with ddH_2O and PBS, and then probed with the primary antibody (ET1612-79, 1/50) for 30 minutes 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.

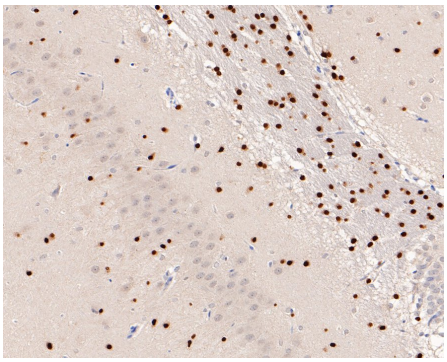

Fig8: Immunohistochemical analysis of paraffin-embedded rat hippocampus tissue with Rabbit anti-SOX10 antibody (ET1612-79) at 1/800 dilution.

The section was pre-treated using heat mediated antigen retrieval with sodium citrate buffer (pH 6.0) for 2 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 (ET1612-79) at 1/800 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.

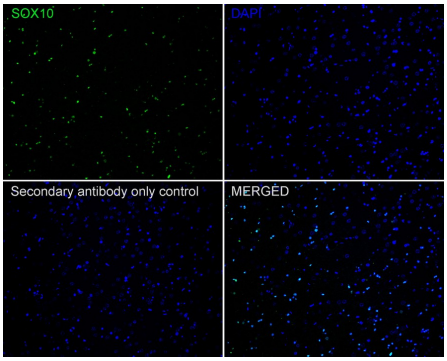

Fig9: Immunofluorescence analysis of paraffin-embedded rat brain tissue labeling SOX10 with Rabbit anti-SOX10 antibody (ET1612-79) at 1/50 dilution.

The section was pre-treated using heat mediated antigen retrieval with sodium citrate buffer (pH 6.0) for 2 minutes. The tissues were blocked in 10% negative goat serum for 1 hour at room temperature, washed with PBS, and then probed with the primary antibody (ET1612-79, green) at 1/50 dilution overnight at 4 ℃, washed with PBS. Goat Anti-Rabbit IgG H&L (iFluor™ 488, HA1121) was used as the secondary antibody at 1/1,000 dilution. Nuclei were counterstained with DAPI (blue).

Background References

1. Guye P et al. Genetically engineering self-organization of human pluripotent stem cells into a liver bud-like tissue using Gata6. Nat Commun 7:10243 (2016).
2. Arts N et al. microRNA-155, induced by interleukin-1 , represses the expression of microphthalmia-associated transcription factor (MITF-M) in melanoma cells. PLoS One 10:e0122517 (2015).