
Product Name: KD-Validated SRY-Box Transcription Factor 9 Recombinant Rabbit Monoclonal Antibody**Catalog #: KVA00849**

For research use only.

Summary

Description	KO&KD-Validated antibody
Host	Rabbit
Application	WB,FCM,ICC,IHC-P
Reactivity	Human,Mouse,Rat
Conjugation	Unconjugated
Modification	Unmodified
Isotype	Rabbit IgG
Clonality	Rabbit mAb
Form	Liquid
Storage	Aliquot and store at -20°C (valid for 12 months). Avoid freeze/thaw cycles.
Shipping	Ice bags
Buffer	Supplied in PBS (pH 7.4) containing 50% glycerol, and 0.02% sodium azide.
Purification	Affinity purification

Application

Dilution Ratio	WB 1:1,000-1:5,000; FC 1:200-1:2,000; ICC 1:100-1:1,000; IHC-P 1:100-1:200
Molecular Weight	Calculated MW: 56.1kDa

Antigen Information

Gene Name	SOX9
Alternative Names	SOX9; SRY-Box Transcription Factor 9; SRA1; Transcription Factor SOX-9; SRY-Box 9; CMPD1; CMD1; Campomelic Dysplasia, Autosomal Sex-Reversal; SRY (Sex-Determining Region Y)-Box 9 Protein; SRY (Sex Determining Region Y)-Box 9; SRY (Sex Determining Region Y)-Box9; SRY-Related HMG-Box, Gene 9; SRXY10; SRXX2
Gene ID	6662.0
SwissProt ID	P48436
Immunogen	A synthesized peptide derived from human SOX9

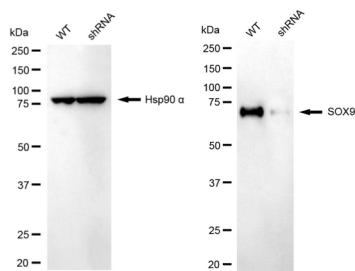
Background

The protein encoded by this gene recognizes the sequence CCTTGAG along with other members of the HMG-box class DNA-binding proteins. It acts during chondrocyte differentiation and, with steroidogenic factor 1, regulates transcription of the anti-Muellerian hormone (AMH) gene. Deficiencies lead to the skeletal malformation syndrome campomelic dysplasia, frequently with sex reversal. [provided by RefSeq, Jul 2008]

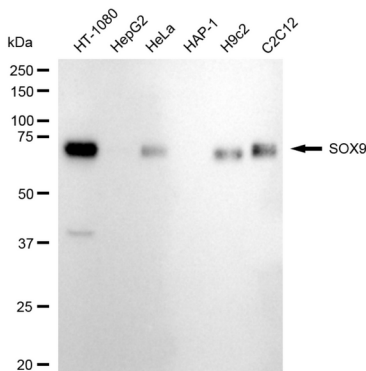
Research Area

Epigenetics and Nuclear Signaling, Neuroscience, Stem Cells, Developmental Biology

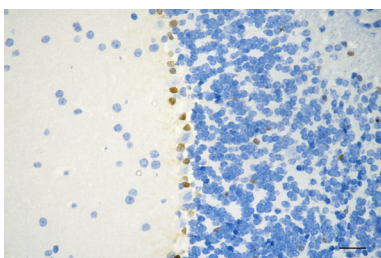
Image Data



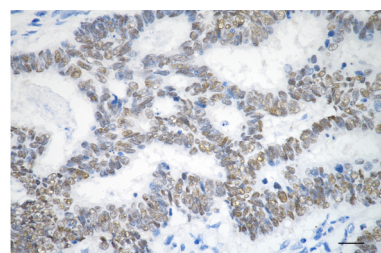
Western blotting analysis using SOX9 antibody (KVA00849). SOX9 expression in wild-type (WT) and SOX9 shRNA knockdown (KD) HeLa cells with 20 µg of total cell lysates. Hsp90 α serves as a loading control. The blot was incubated with SOX9 antibody (KVA00849, 1:5,000) and HRP-conjugated goat anti-rabbit secondary antibody (APS0635, 1:10,000) respectively.



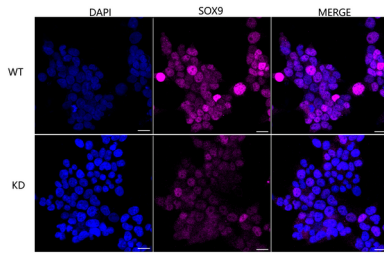
Western blotting analysis using SOX9 antibody (KVA00849). Total cell lysates (30 µg) from various cell lines were loaded and separated by SDS-PAGE. The blot was incubated with SOX9 antibody (KVA00849, 1:5,000) and HRP-conjugated goat anti-rabbit secondary antibody (APS0635, 1:10,000) respectively.



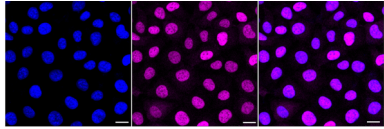
Immunohistochemistry was performed on paraffin-embedded mouse brain using SOX9 antibody (KVA00849, 1:200). Antigen retrieval was done in sodium citrate buffer (pH 6.0). DAB was used for detection, with hematoxylin counterstaining. Images were acquired using a Nikon Ci-L Plus microscope (40× objective). Scale bar: 25 µm.



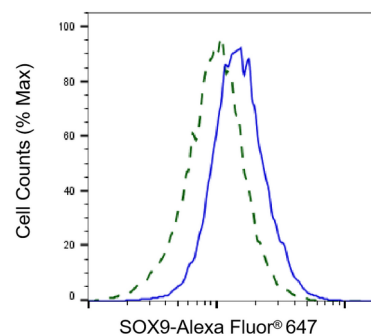
Immunohistochemistry was performed on paraffin-embedded human sigmoid colon carcinoma using SOX9 antibody (KVA00849, 1:200). Antigen retrieval was done in sodium citrate buffer (pH 6.0). DAB was used for detection, with hematoxylin counterstaining. Images were acquired using a Nikon Ci-L Plus microscope (40× objective). Scale bar: 25 µm.



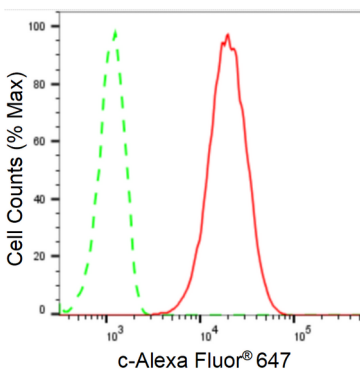
Immunocytochemical staining of HeLa cells using SOX9 antibody (KVA00849, 1:1,000), Top panel: wild-type (WT); Bottom panel: SOX9 shRNA knockdown (KD). Nuclei were stained blue with DAPI; SOX9 was stained magenta with Alexa Fluor® 647. Scale bar, 20 μm. Permeabilization: Triton.



Immunocytochemical staining of HT-1080 cells with SOX9 antibody (KVA00849, 1:1,000). Nuclei were stained blue with DAPI; SOX9 was stained magenta with Alexa Fluor® 647. Images were taken using Leica stellaris 5. Protein abundance based on laser Intensity and smart gain: Medium. Scale bar, 20 μm.



Validation of SOX9 knockdown using flow cytometry. Wild-type(WT, Blue) and knockdown(KD, Green) HeLa cells were stained with SOX9 antibody (KVA00849, 1:2,000) and analyzed using BD flow cytometer.



Flow cytometric analysis of SOX9 expression in HT-1080 cells using SOX9 antibody (KVA00849, 1:2,000). Green, isotype control; red, SOX9.