

Product datasheet

Anti-SOX9 antibody [3C10] - BSA and Azide free ab76997

★★★★★ 17 Abreviews 45 References 6 Images

Overview

Product name	Anti-SOX9 antibody [3C10] - BSA and Azide free
Description	Mouse monoclonal [3C10] to SOX9 - BSA and Azide free
Host species	Mouse
Tested applications	Suitable for: WB, IHC-P, ICC/IF, Flow Cyt, IP
Species reactivity	Reacts with: Human
Immunogen	Recombinant fragment: EQLSPSHYSE QQQHSPQQIA YSPFNLPHYS PSYPPITRSQ YDYTDHQNSS SYSHAAGQG TGLYSTFTYM NPAQRPMYTP IADTSGVPSI PQTHSPQHWE QPVYTQLTRP, corresponding to amino acids 400-509 of human SOX9 (NP_000337) with a 26 kDa tag Run BLAST with Expasy Run BLAST with NCBI
Positive control	WB: HepG2 whole cell lysate (ab7900). IHC-P: Human tonsil tissue. ICC/IF: HepG2 cells. Flow Cyt: HepG2 cells.
General notes	<p>This product was changed from ascites to tissue culture supernatant on 22/03/2019. Please note that the dilutions may need to be adjusted accordingly. If you have any questions, please do not hesitate to contact our scientific support team.</p> <p>The Life Science industry has been in the grips of a reproducibility crisis for a number of years. Abcam is leading the way in addressing this with our range of recombinant monoclonal antibodies and knockout edited cell lines for gold-standard validation. Please check that this product meets your needs before purchasing.</p> <p>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, along with publications, customer reviews and Q&As</p>

Properties

Form	Liquid
Storage instructions	Shipped at 4°C. Upon delivery aliquot and store at -20°C or -80°C. Avoid repeated freeze / thaw cycles.
Storage buffer	pH: 7.4 Constituent: PBS

Carrier free	Yes
Purity	Tissue culture supernatant
Clonality	Monoclonal
Clone number	3C10
Isotype	IgG2a
Light chain type	kappa

Applications

The Abpromise guarantee Our **Abpromise guarantee** covers the use of ab76997 in the following tested applications.

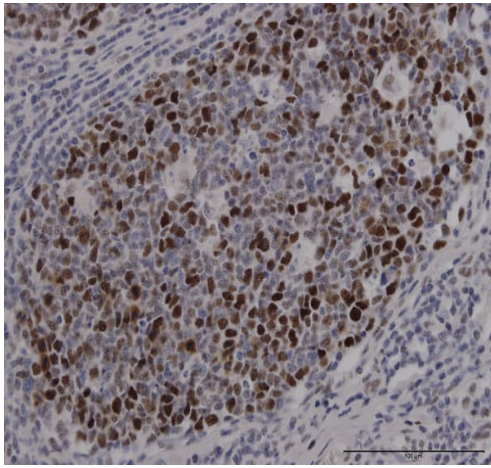
The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Application	Abreviews	Notes
WB		Use at an assay dependent concentration. Predicted molecular weight: 56 kDa.
IHC-P	★★★★★ (2)	Use at an assay dependent concentration. Perform heat mediated antigen retrieval via the pressure cooker method before commencing with IHC staining protocol.
ICC/IF	★★★★★ (2)	Use at an assay dependent concentration.
Flow Cyt		Use at an assay dependent concentration. ab170191 - Mouse monoclonal IgG2a, is suitable for use as an isotype control with this antibody.
IP		Use at an assay dependent concentration.

Target

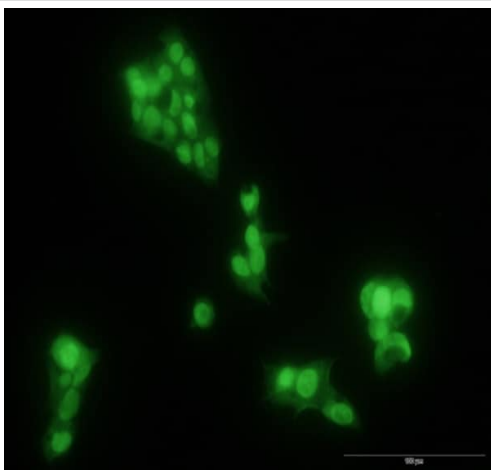
Function	Plays an important role in the normal skeletal development. May regulate the expression of other genes involved in chondrogenesis by acting as a transcription factor for these genes.
Involvement in disease	Defects in SOX9 are the cause of campomelic dysplasia (CMD1) [MIM:114290]. CMD1 is a rare, often lethal, dominantly inherited, congenital osteochondrodysplasia, associated with male-to-female autosomal sex reversal in two-thirds of the affected karyotypic males. A disease of the newborn characterized by congenital bowing and angulation of long bones, unusually small scapulae, deformed pelvis and spine and a missing pair of ribs. Craniofacial defects such as cleft palate, micrognathia, flat face and hypertelorism are common. Various defects of the ear are often evident, affecting the cochlea, malleus incus, stapes and tympanum. Most patients die soon after birth due to respiratory distress which has been attributed to hypoplasia of the tracheobronchial cartilage and small thoracic cage.
Sequence similarities	Contains 1 HMG box DNA-binding domain.
Cellular localization	Nucleus.

Images



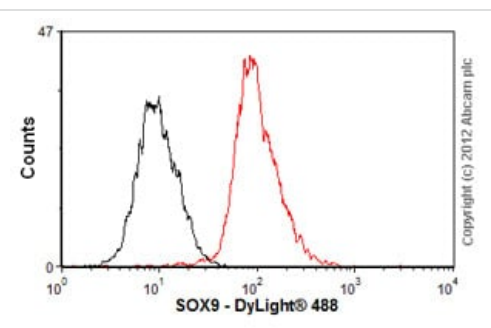
Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-SOX9 antibody [3C10] - BSA and Azide free (ab76997)

Immunoperoxidase analysis of SOX9 expression on formalin fixed, paraffin embedded human tonsil tissue using 0.7 µg/ml of ab76997.



Immunocytochemistry/ Immunofluorescence - Anti-SOX9 antibody [3C10] - BSA and Azide free (ab76997)

Immunocytochemistry/Immunofluorescence analysis of SOX9 expression in HepG2 cells, using 10 µg/ml of ab76997.

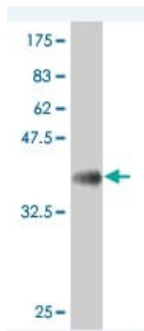


Flow Cytometry - Anti-SOX9 antibody [3C10] - BSA and Azide free (ab76997)

Overlay histogram showing HepG2 cells stained with ab76997 (red line). The cells were fixed with 80% methanol (5 min) and then permeabilized with 0.1% PBS-Tween for 20 min. The cells were then incubated in 1x PBS / 10% normal goat serum / 0.3M glycine to block non-specific protein-protein interactions followed by the antibody (ab76997, 1µg/1x10⁶ cells) for 30 min at 22°C. The secondary antibody used was DyLight® 488 goat anti-mouse IgG (H+L) ([ab96879](#)) at 1/500 dilution for 30 min at 22°C. Isotype control antibody (black line) was mouse IgG2a [ICIGG2A] ([ab91361](#), 2µg/1x10⁶ cells) used under the same conditions.

Acquisition of >5,000 events was performed.

This image was generated using the ascites version of the product.



Western blot - Anti-SOX9 antibody [3C10] - BSA and Azide free (ab76997)

Anti-SOX9 antibody [3C10] - BSA and Azide free (ab76997) at 5 µg/ml + immunogen at 0.2 µg

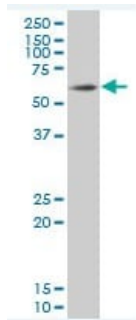
Secondary

Goat Anti-Mouse IgG (H&L)-HRP Conjugate at 1/5000 dilution

Predicted band size: 56 kDa

Observed band size: 38 kDa

This image was generated using the ascites version of the product.



Western blot - Anti-SOX9 antibody [3C10] - BSA and Azide free (ab76997)

Anti-SOX9 antibody [3C10] - BSA and Azide free (ab76997) at 5 µg/ml + HepG2 cell lysate at 25 µg

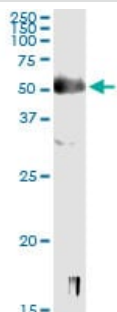
Secondary

Goat Anti-Mouse IgG (H&L)-HRP Conjugate at 1/2500 dilution

Predicted band size: 56 kDa

Observed band size: 56 kDa

This image was generated using the ascites version of the product.



Immunoprecipitation - Anti-SOX9 antibody [3C10] - BSA and Azide free (ab76997)

Immunoprecipitation of SOX9 transfected lysate using anti-SOX9 monoclonal antibody and Protein A magnetic beads. Western blot was performed with an rabbit anti-SOX9 polyclonal antibody.

This image was generated using the ascites version of the product.

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