# abcam

## Product datasheet

# Alexa Fluor® 647 Anti-SOX9 antibody [EPR14335] ab196184



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#### Overview

Product name Alexa Fluor® 647 Anti-SOX9 antibody [EPR14335]

**Description** Alexa Fluor® 647 Rabbit monoclonal [EPR14335] to SOX9

Host species Rabbit

**Conjugation** Alexa Fluor® 647. Ex: 652nm, Em: 668nm

Tested applications
Suitable for: ICC/IF
Species reactivity
Reacts with: Human

Predicted to work with: Mouse, Rat

Immunogen Recombinant fragment within Human SOX9 aa 150-300. The exact immunogen sequence used

to generate this antibody is proprietary information. If additional detail on the immunogen is needed to determine the suitability of the antibody for your needs, please **contact** our Scientific

Support team to discuss your requirements.

Database link: P48436

Run BLAST with
Run BLAST with

Positive control ICC-IF: SW480 cells, HepG2 cells.

**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<sup>®</sup> technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to **RabMAb**<sup>®</sup> **patents**.

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#### **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. Store In the Dark.

**Storage buffer** pH: 7.40

Preservative: 0.02% Sodium azide

Constituents: PBS, 30% Glycerol (glycerin, glycerine), 1% BSA

Purity Protein A purified

ClonalityMonoclonalClone numberEPR14335

**Isotype** IgG

#### **Applications**

The Abpromise guarantee Our <u>Abpromise guarantee</u> covers the use of ab196184 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	<b>★★★★★ (1)</b>	1/100.

#### **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,

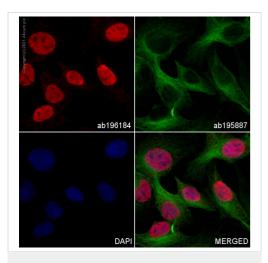
often lethal, dominantly inherited, congenital osteochondrodysplasia, associated with male-to-female autosomal sex reversal in two-thirds of the affected karyotypic males. A disease of the newborn characterized by congenital bowing and angulation of long bones, unusually small scapulae, deformed pelvis and spine and a missing pair of ribs. Craniofacial defects such as cleft palate, micrognatia, 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.

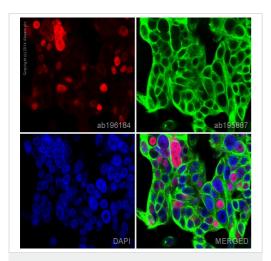
#### **Images**



Immunocytochemistry/ Immunofluorescence - Alexa Fluor® 647 Anti-SOX9 antibody [EPR14335] (ab196184)

ab196184 staining SOX9 in HepG2 cells. The cells were fixed with 4% formaldehyde (10 min), permeabilized with 0.1% Triton X-100 for 5 minutes and then blocked with 1% BSA/10% normal goat serum/0.3M glycine in 0.1% PBS-Tween for 1h. The cells were then incubated overnight at +4°C with ab196184 at a 1/100 dilution (shown in red) and <a href="mailto:ab195887">ab195887</a>, Mouse monoclonal to alpha Tubulin (Alexa Fluor® 488), at a 1/250 dilution (shown in green). Nuclear DNA was labelled with DAPI (shown in blue).

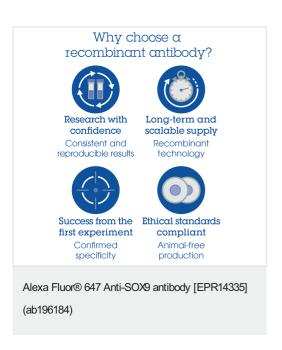
Image was acquired with a high-content analyser (Operetta CLS, Perkin Elmer) and a maximum intensity projection of confocal sections is shown.



Immunocytochemistry/ Immunofluorescence - Alexa Fluor® 647 Anti-SOX9 antibody [EPR14335] (ab196184)

ab196184 staining SOX9 in SW480 cells. The cells were fixed with 4% formaldehyde (10 min), permeabilized with 0.1% Triton X-100 for 5 minutes and then blocked with 1% BSA/10% normal goat serum/0.3M glycine in 0.1%PBS-Tween for 1h. The cells were then incubated overnight at +4°C with ab196184 at a 1/100 dilution (shown in red) and <a href="mailto:ab195887">ab195887</a>, Mouse monoclonal to alpha Tubulin (Alexa Fluor® 488), at a 1/250 dilution (shown in green). Nuclear DNA was labelled with DAPI (shown in blue).

Image was taken with a confocal microscope (Leica-Microsystems, TCS SP8).



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