

## Product datasheet

# Anti-SOX9 antibody ab58191

[3 Images](#)

### Overview

|                            |  |
|----------------------------|--|
| <b>Product name</b>        | Anti-SOX9 antibody   |
| <b>Description</b>         | Mouse monoclonal to SOX9   |
| <b>Host species</b>        | Mouse  |
| <b>Tested applications</b> | <b>Suitable for:</b> WB, Sandwich ELISA, Flow Cyt                        |
| <b>Species reactivity</b>  | <b>Reacts with:</b> Human  |
| <b>Immunogen</b>           | Recombinant fragment, corresponding to amino acids 400-510 of Human SOX9 |

### Properties

|                             |   |
|-----------------------------|---|
| <b>Form</b>                 | Liquid  |
| <b>Storage instructions</b> | Shipped at 4°C. Upon delivery aliquot and store at -20°C or -80°C. Avoid repeated freeze / thaw cycles. |
| <b>Storage buffer</b>       | Preservative: None<br>PBS, pH 7.2   |
| <b>Purity</b>               | Protein G purified  |
| <b>Clonality</b>            | Monoclonal  |
| <b>Isotype</b>              | IgG1  |
| <b>Light chain type</b>     | kappa   |

### Applications

Our [Abpromise guarantee](#) covers the use of **ab58191** 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 a concentration of 1 - 5 µg/ml. This antibody has only been tested in WB against the recombinant fragment used as immunogen. We have no data on the detection of endogenous protein. |

| Application    | Abreviews | Notes  |
|----------------|-----------|--|
| Sandwich ELISA |           | Use a concentration of 5 µg/ml. Can be paired for Sandwich ELISA with <a href="#">Rabbit polyclonal to SOX9 (ab26414)</a> . For sandwich ELISA, use this antibody as Capture at 5 µg/ml with <a href="#">Rabbit polyclonal to SOX9 (ab26414)</a> as Detection. |
| Flow Cyt       |           | Use 0.1µg for 10 <sup>6</sup> cells.<br><a href="#">ab170190</a> - Mouse monoclonal IgG1, is suitable for use as an isotype control with this antibody.  |

## 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.

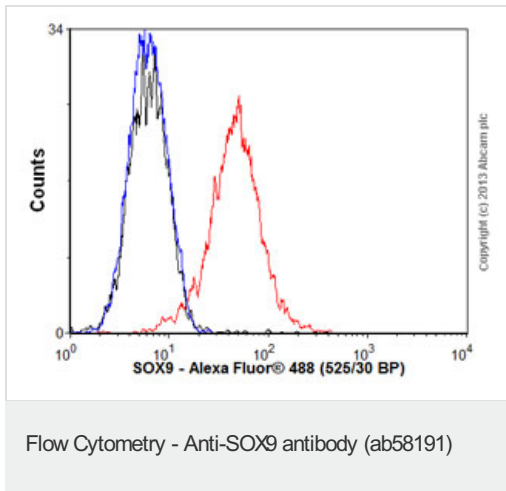
### Sequence similarities

Contains 1 HMG box DNA-binding domain.

### Cellular localization

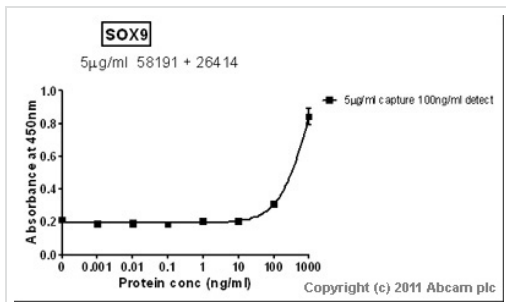
Nucleus.

## Images



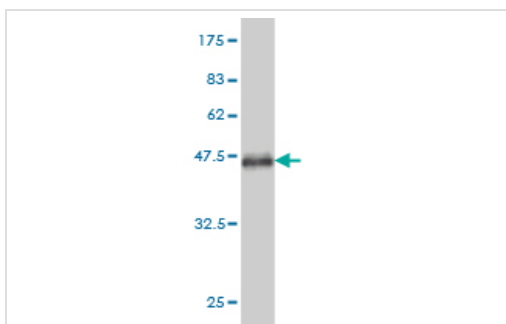
Flow Cytometry - Anti-SOX9 antibody (ab58191)

Overlay histogram showing HepG2 cells stained with ab58191 (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 (ab58191, 0.1µg/1x10<sup>6</sup> cells) for 30 min at 22°C. The secondary antibody used was Alexa Fluor® 488 goat anti-mouse IgG (H+L) (ab150113) at 1/2000 dilution for 30 min at 22°C. Isotype control antibody (black line) was mouse IgG1 [ICIGG1] (ab91353, 1µg/1x10<sup>6</sup> cells) used under the same conditions. Unlabelled sample (blue line) was also used as a control. Acquisition of >5,000 events were collected using a 20mW Argon ion laser (488nm) and 525/30 bandpass filter.



Sandwich ELISA - SOX9 antibody (ab58191)

Standard Curve for SOX9 ; dilution range 1µg/ml to 1µg/ml using Capture Antibody Mouse monoclonal to SOX9 (ab58191) at 5µg/ml and Detector Antibody Rabbit polyclonal to SOX9 (ab26414) at 0.1µg/ml.



Western blot - SOX9 antibody (ab58191)

Western blot against tagged recombinant protein immunogen using ab58191 SOX9 antibody at 1µg/ml. Predicted band size of immunogen is 38 kDa

**Please note:** All products are "FOR RESEARCH USE ONLY AND ARE NOT INTENDED FOR DIAGNOSTIC OR THERAPEUTIC USE"

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