abcam

Product datasheet

Anti-SOX9 antibody [EPR12755] ab182579

Recombinant RabMAb

3 References 7 Images

Overview

Product name Anti-SOX9 antibody [EPR12755]

Description Rabbit monoclonal [EPR12755] to SOX9

Host species Rabbit

Tested applications Suitable for: Flow Cyt (Intra), WB, ICC/IF, IP

Species reactivity Reacts with: Human

Immunogen Recombinant fragment. This information is proprietary to Abcam and/or its suppliers.

Positive control SW480 and Caco 2 cell lysates; SW480 and Caco 2 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® technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to **RabMAb**® **patents**.

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.

Storage buffer pH: 7.2

Preservative: 0.01% Sodium azide

Constituents: 59% PBS, 0.05% BSA, 40% Glycerol (glycerin, glycerine)

Purity Protein A purified

Clonality Monoclonal Clone number EPR12755

Isotype lgG

Applications

The Abpromise guarantee

Our **Abpromise guarantee** covers the use of ab182579 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 |
|------------------|-----------|---|
| Flow Cyt (Intra) | | Use at an assay dependent concentration. |
| WB | | 1/10000 - 1/50000. Detects a band of approximately 70 kDa (predicted molecular weight: 56 kDa). |
| ICC/IF | | 1/250. |
| IP | | 1/20 - 1/80. |

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.

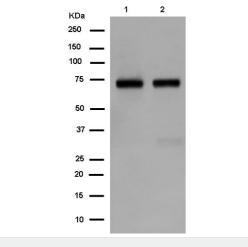
Sequence similarities

Contains 1 HMG box DNA-binding domain.

Cellular localization

Nucleus.

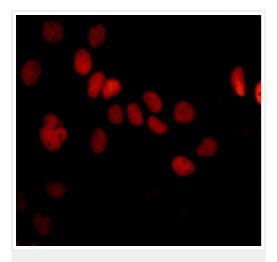
Images



Western blot - Anti-SOX9 antibody [EPR12755] (ab182579)

250 kDa = 150 kDa --100 kDa 🕳 75 kDa 🕳 50 kDa -37 kDa 🕳 25 kDa 🕳 20 kDa 🕳 15 kDa 🕳 10 kDa 🕳

Immunoprecipitation - Anti-SOX9 antibody [EPR12755] (ab182579)



Immunocytochemistry/ Immunofluorescence - Anti-SOX9 antibody [EPR12755] (ab182579)

All lanes: Anti-SOX9 antibody [EPR12755] (ab182579) at 1/10000 dilution

Lane 1: SW480 cell lysate Lane 2: Caco 2 cell lysate

Lysates/proteins at 20 µg per lane.

Secondary

All lanes: Goat Anti-Rabbit lgG, (H+L), Peroxidase conjugated at 1/1000 dilution

Predicted band size: 56 kDa

All lanes: Anti-SOX9 antibody [EPR12755] (ab182579) at 1/80 dilution

Lane 1: SW480 (Human colorectal adenocarcinoma epithelial cell) whole cell lysate, 10ug

Lane 2: SW480, 350ug, +, ab182579 2ug

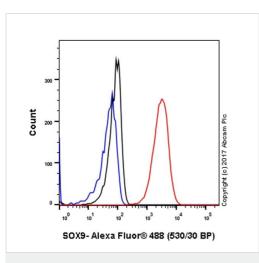
Lane 3: SW480 cell lysate, 350ug + rabbit lgG (ab172730), 2ug

Secondary

All lanes: VeriBlot for IP Detection Reagent (HRP) (ab131366) at 1/1000 dilution

Observed band size: 75 kDa

Immunofluorescent analysis of Caco 2 cells labeling SOX9 using ab182579 at 1/250 dilution. A Goat anti rabbit lgG (Alexa Fluor555) at 1/200 dilution was used as secondary antibody. Cells were fixed with 4% paraformaldehyde.



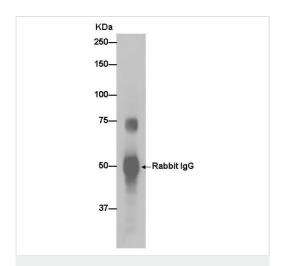
Flow Cytometry (Intracellular) - Anti-SOX9 antibody [EPR12755] (ab182579)

Intracellular Flow Cytometry analysis of SW480 (human colorectal adenocarcinoma) cells labeling SOX9 with purified ab182579 at 1/500 dilution (1ug/ml) (red). Cells were fixed with 4% paraformaldehyde and permeabilised with 90% methanol. A Goat anti rabbit lgG (Alexa Fluor[®] 488) (ab150077) (1/2000 dilution) was used as the secondary antibody. Rabbit monoclonal lgG (Black) (ab172730) was used as the isotype control, cells without incubation with primary antibody and secondary antibody (Blue) were used as the unlabeled control.



Immunocytochemistry/ Immunofluorescence - Anti-SOX9 antibody [EPR12755] (ab182579)

Immunofluorescence analysis of SW480 cells labeling SOX9 using ab182579 at 1/250 dilution. A Goat anti rabbit lgG (Alexa Fluor555) at 1/200 dilution was used as secondary antibody. Cells were fixed with 4% paraformaldehyde.



Immunoprecipitation - Anti-SOX9 antibody [EPR12755] (ab182579)

Detection of SOX9 by Western Blot of Immunprecipitate.

Caco 2 cell lysate immunoprecipitated using ab182579 at 1/50 dilution.

A Goat Anti-Rabbit lgG, (H+L), Peroxidase conjugated at 1/1000 was used as secondary antibody.



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