

Product datasheet

Anti-SOX9 antibody [EPR14335] - BSA and Azide free ab220812

Recombinant RabMAb

[2 References](#) [7 Images](#)

Overview

| | |
|----------------------------|--|
| Product name | Anti-SOX9 antibody [EPR14335] - BSA and Azide free |
| Description | Rabbit monoclonal [EPR14335] to SOX9 - BSA and Azide free |
| Host species | Rabbit |
| Tested applications | Suitable for: WB, IHC-P, ICC/IF, Flow Cyt, IP |
| Species reactivity | Reacts with: Mouse, Rat, Human |
| Immunogen | Recombinant fragment. This information is proprietary to Abcam and/or its suppliers. |
| Positive control | SW480 and PC3 cell lysates; Human colon, Rat colon and Mouse colon tissues; SW480 cells; PC3 cells. |
| General notes | Ab220812 is the carrier-free version of ab185230 . This format is designed for use in antibody labeling, including fluorochromes, metal isotopes, oligonucleotides, enzymes. |

Our [carrier-free formats](#) are supplied in a buffer free of BSA, sodium azide and glycerol for higher conjugation efficiency.

Use our [conjugation kits](#) for antibody conjugates that are ready-to-use in as little as 20 minutes with <1 minute hands-on-time and 100% antibody recovery: available for fluorescent dyes, HRP, biotin and gold.

ab220812 is compatible with the Maxpar® Antibody Labeling Kit from Fluidigm.

Maxpar® is a trademark of Fluidigm Canada Inc.

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. Do Not Freeze. |
| Storage buffer | pH: 7.2 Constituent: PBS |
| Carrier free | Yes |
| Purity | Protein A purified |
| Clonality | Monoclonal |
| Clone number | EPR14335 |
| Isotype | IgG |

Applications

The Abpromise guarantee Our [Abpromise guarantee](#) covers the use of ab220812 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. Detects a band of approximately 70 kDa (predicted molecular weight: 56 kDa). |
| IHC-P | | Use at an assay dependent concentration. Perform heat mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol. |
| ICC/IF | | Use at an assay dependent concentration. |
| Flow Cyt | | Use at an assay dependent concentration. ab199376 - Rabbit monoclonal IgG, is suitable for use as an isotype control with this antibody. |
| IP | | Use at an assay dependent concentration. |

Target

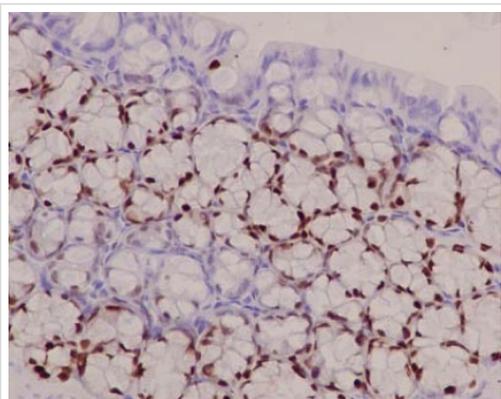
| | |
|-------------------------------|--|
| Function | Plays an important role in the normal skeletal development. May regulate the expression of other genes involved in chondrogenesis by acting as a transcription factor for these genes. |
| Involvement in disease | Defects in SOX9 are the cause of 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.

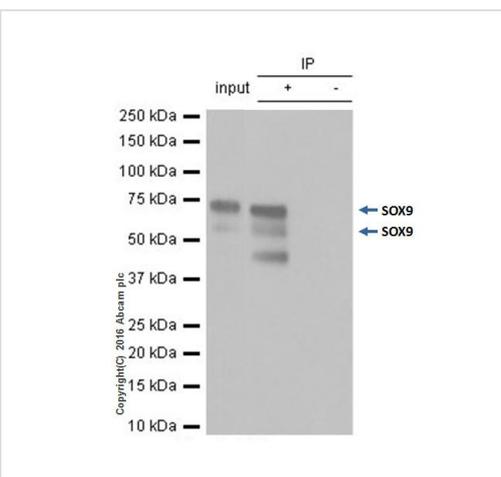
Images

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-SOX9 antibody [EPR14335] - BSA and Azide free (ab220812)

Immunohistochemical analysis of paraffin-embedded Mouse colon tissue labeling SOX9 with [ab185230](#) at 1/2000 dilution followed by pre-diluted HRP-conjugated secondary antibody and counter-stained with Hematoxylin.

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide ([ab185230](#)).

Perform heat mediated antigen retrieval with EDTA buffer pH 9 before commencing with IHC staining protocol.



Immunoprecipitation - Anti-SOX9 antibody [EPR14335] - BSA and Azide free (ab220812)

[ab185230](#) at 1/60 immunoprecipitating SOX9 in SW480 (human colorectal adenocarcinoma) whole cell lysate observed at 56 and 75 KDa (lanes 1 and 2).

The expression pattern observed is consistent with the literature (PMID: 10682837) with an additional off-target band at 46 kD.

Lane 1 (input): SW480 whole cell lysate 10µg

Lane 2 (+): SW480 whole cell lysate.

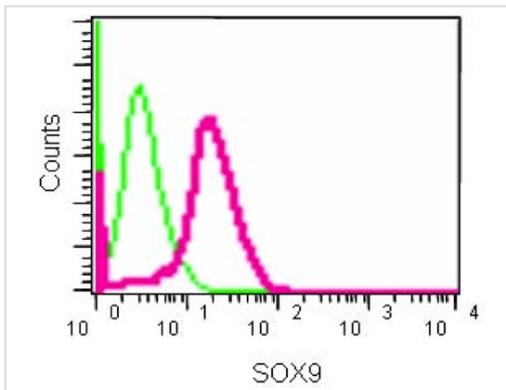
Lane 3 (-): Rabbit monoclonal IgG ([ab172730](#)) instead of [ab185230](#) in SW480 whole cell lysate

For western blotting, [ab185230](#) (1/1000) was used as the primary antibody and [ab131366](#) VeriBlot for IP (HRP) was used for detection at 1/1000 dilution.

Blocking buffer and concentration: 5% NFDM/TBST.

Diluting buffer and concentration: 5% NFDM /TBST.

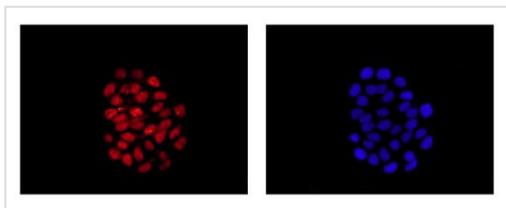
This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide ([ab185230](#)).



Flow Cytometry (Intracellular) - Anti-SOX9 antibody
[EPR14335] - BSA and Azide free (ab220812)

Flow Cytometric analysis of PC3 cells (2% paraformaldehyde-fixed) labeling SOX9 with [ab185230](#) at 1/190 dilution (red) or a rabbit IgG (negative) (green), followed by Goat anti rabbit IgG (FITC) secondary at 1/150 dilution.

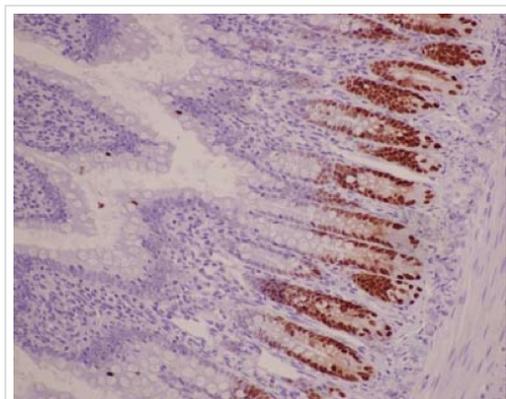
This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide ([ab185230](#)).



Immunocytochemistry/ Immunofluorescence - Anti-SOX9 antibody [EPR14335] - BSA and Azide free (ab220812)

Immunofluorescent analysis of SW480 cells (4% paraformaldehyde-fixed) labeling SOX9 with [ab185230](#) at 1/250 dilution followed by Goat anti rabbit IgG (AlexaFluor® 555) secondary at 1/200 dilution and counter-stained with DAPI (blue).

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide ([ab185230](#)).

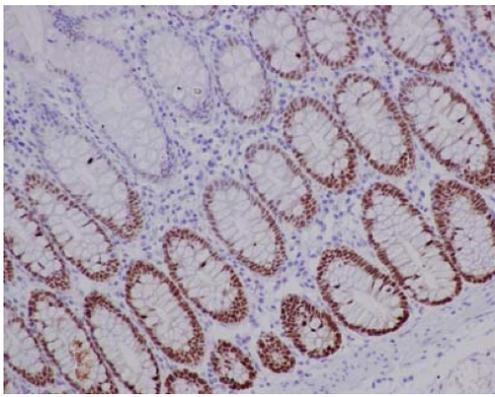


Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-SOX9 antibody [EPR14335] - BSA and Azide free (ab220812)

Immunohistochemical analysis of paraffin-embedded Rat colon tissue labeling SOX9 with [ab185230](#) at 1/2000 dilution followed by pre-diluted HRP-conjugated secondary antibody and counter-stained with Hematoxylin.

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide ([ab185230](#)).

Perform heat mediated antigen retrieval with EDTA buffer pH 9 before commencing with IHC staining protocol.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-SOX9 antibody [EPR14335] - BSA and Azide free (ab220812)

Immunohistochemical analysis of paraffin-embedded Human colon tissue labeling SOX9 with [ab185230](#) at 1/2000 dilution followed by pre-diluted HRP-conjugated secondary antibody and counter-stained with Hematoxylin.

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide ([ab185230](#)).

Perform heat mediated antigen retrieval with EDTA buffer pH 9 before commencing with IHC staining protocol.

Why choose a recombinant antibody?



Anti-SOX9 antibody [EPR14335] - BSA and Azide free (ab220812)

Please note: All products are "FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC PROCEDURES"

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