abcam

ab181101

Anti-Alx1 antibody [EPR11331]

Recombinant | RabMAb

Key facts

Isotype	IgG
Host species	Rabbit
Storage buffer	Preservative: 0.01% Sodium azide Constituents: PBS, 40% Glycerol (glycerin, glycerine), 0.05% BSA
Form	Liquid
Clonality	Monoclonal
Immunogen	The exact immunogen used to generate this antibody is proprietary information.
Clone number	EPR11331
Purity	Tissue culture supernatant

Reactivity data

WB

Tested

Species	Human
Dilution info	1/1000 - 1/10000
Notes	-

Expected

Species	Mouse, Rat

Dilution info	Use at an assay dependent concentration.
Notes	-

Flow Cyt (Intra)

Tested

Species	Human
Dilution info	1/230
Notes	ab172730 - Rabbit monoclonal IgG, is suitable for use as an isotype control with this antibody.

Predicted

Species	Mouse, Rat
Dilution info	-
Notes	-

Target data

See full target information ALX1

Function	Sequence-specific DNA-binding transcription factor that binds palindromic sequences within promoters and may activate or repress the transcription of a subset of genes (PubMed:8756334, PubMed:9753625). Most probably regulates the expression of genes involved in the development of mesenchyme-derived craniofacial structures. Early on in development, it plays a role in forebrain mesenchyme survival (PubMed:20451171). May also induce epithelial to mesenchymal transition (EMT) through the expression of SNAI1 (PubMed:23288509).

Storage

Shipped at conditions	Conditional Ambient
Appropriate short-term storage duration	1-2 weeks
Appropriate short-term storage conditions	+4°C

Appropriate long-term storage conditions	-20°C
Aliquoting information	Upon delivery aliquot
Storage information	Avoid freeze / thaw cycle

Notes

Patented technology
Our RabMAb® technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to RabMAb® patents.

What are the advantages of a recombinant monoclonal antibody?
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 batch production

For more information, read more on recombinant antibodies.

Supplementary info

This supplementary information is collated from multiple sources and compiled automatically.

Activity summary	Alx1 also known as aristaless-related homeobox 1 is a protein functioning as a transcription factor with an approximate mass of 41 kDa. Alx1 plays a critical role in gene expression regulation during embryonic development. It is expressed in various tissues particularly in craniofacial regions and influences the patterning of facial structures. Researchers have identified its involvement in skeletal morphogenesis linking it to the development and differentiation of tissues involved in forming the skeletal framework.
Biological function summary	Alx1 regulates the expression of genes involved in osteogenesis and craniofacial development. It acts as part of a larger transcriptional complex that guides cellular differentiation. This protein demonstrates its function by activating various downstream targets essential for normal bone and cartilage formation. Additionally Alx1's activity in cellular signaling pathways ensures proper tissue patterning during embryogenesis.
Pathways	Alx1 plays a significant role in the Wnt signaling and BMP (Bone Morphogenetic Protein) pathways both paramount to developmental processes. These pathways influence cell growth differentiation and apoptosis. Alx1 interacts with proteins such as β-catenin in the Wnt pathway which are vital for craniofacial formation. In the BMP pathway it interfaces with SMAD proteins facilitating transcription of osteogenic genes.

Associated diseases and disorders	Alx1 mutations have links to facial dysostosis and developmental delays. These conditions stem from misregulated osteogenic pathways where Alx1 functionality is compromised. Alx1 has connections to other proteins like PAX9 which also plays roles in craniofacial development sharing pathways that influence developmental accuracy. Understanding Alx1's function and its associated networks aids in diagnosing and potentially developing treatments for these developmental disorders.

Product promise

Tested

We have tested this species and application combination and it works. It is covered by our product promise.

Expected

We have not tested this specific species and application combination in-house, but expect it will work. It is covered by our product promise.

Predicted

This species and application combination has not been tested, but we predict it will work based on strong homology. However, this combination is not covered by our product promise.

Not recommended

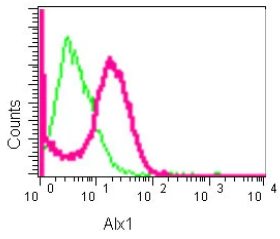
We do not recommend this combination. It is not covered by our product promise.

We are dedicated to supporting your work with high quality reagents and we are here for you every step of the way should you need us.

In the unlikely event of one of our products not working as expected, you are covered by our product promise.

Full details and terms and conditions can be found here:
Terms & Conditions.

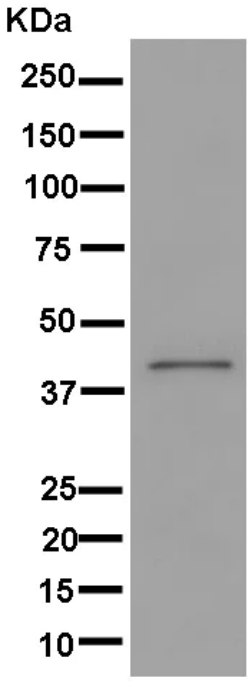
3 product images



Flow Cytometry (Intracellular) - Anti-Alx1 antibody [EPR11331] (ab181101)

Alx1 Flow Cytometry (Intracellular) staining using rabbit Anti-Alx1 antibody

Intracellular Flow Cytometry analysis of 2% paraformaldehydefixed MCF7 cells labeling Alx1 with ab181101 at 1/230 dilution (red) or a Rabbit monoclonal IgG Isotype control (green), followed by Goat anti rabbit IgG (FITC) at a 1/50 dilution.



Western blot - Anti-Alx1 antibody [EPR11331] (ab181101)

Alx1 Western blot staining of HeLa cell lysate using rabbit Anti-Alx1 antibody

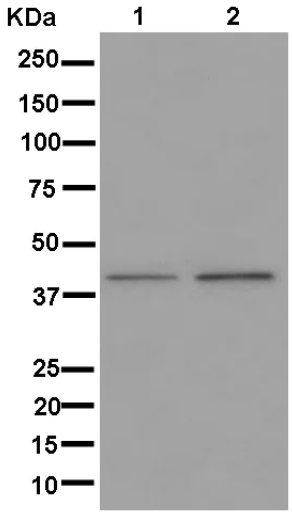
All lanes:
Western blot - Anti-Alx1 antibody [EPR11331] (ab181101) at 1/10000 dilution

All lanes:
HeLa cell lysate at 20 µg

Secondary

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

Predicted band size: 36 kDa



Western blot - Anti-Alx1 antibody [EPR11331] (ab181101)

Alx1 Western blot staining using rabbit Anti-Alx1 antibody

All lanes:
Western blot - Anti-Alx1 antibody [EPR11331] (ab181101) at 1/2000 dilution

Lane 1:
MCF7 cell lysate at 20 µg

Lane 2:
HepG2 cell lysate at 20 µg

Secondary

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

Predicted band size: 36 kDa

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.