


Product datasheet

Anti-Msx2/Hox8 antibody ab223692

[7 References](#) [4 Images](#)

Overview

| | |
|----------------------------|---|
| Product name | Anti-Msx2/Hox8 antibody |
| Description | Rabbit polyclonal to Msx2/Hox8 |
| Host species | Rabbit |
| Tested applications | Suitable for: IHC-P |
| Species reactivity | Reacts with: Human Predicted to work with: Cow, Chimpanzee, Gorilla  |
| Immunogen | Recombinant fragment corresponding to Human Msx2/Hox8 aa 1-150. Database link: P35548 Run BLAST with Run BLAST with |
| Positive control | IHC-P: Human endometrium, placenta and urinary bladder tissue. |
| General notes | <p>The Life Science industry has been in the grips of a reproducibility crisis for a number of years. Abcam is leading the way in addressing this with our range of recombinant monoclonal antibodies and knockout edited cell lines for gold-standard validation. Please check that this product meets your needs before purchasing.</p> <p>If you have any questions, special requirements or concerns, please send us an inquiry and/or contact our Support team ahead of purchase. Recommended alternatives for this product can be found below, along with publications, customer reviews and Q&As</p> |

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: 7.20 Preservative: 0.02% Sodium azide Constituents: 40% Glycerol (glycerin, glycerine), PBS |
| Purity | Immunogen affinity purified |
| Clonality | Polyclonal |
| Isotype | IgG |

Applications

The Abpromise guarantee Our **Abpromise guarantee** covers the use of ab223692 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 |
|-------------|-----------|--|
| IHC-P | | 1/50 - 1/200. Perform heat mediated antigen retrieval with citrate buffer pH 6 before commencing with IHC staining protocol. |

Target

Function

Acts as a transcriptional regulator in bone development. Represses the ALPL promoter activity and antagonizes the stimulatory effect of DLX5 on ALPL expression during osteoblast differentiation. Probable morphogenetic role. May play a role in limb-pattern formation. In osteoblasts, suppresses transcription driven by the osteocalcin FGF response element (OCFRE). Binds to the homeodomain-response element of the ALPL promoter.

Involvement in disease

Defects in MSX2 are the cause of parietal foramina 1 (PFM1) [MIM:168500]; also known as foramina parietalia permagna (FPP). PFM1 is an autosomal dominant disease characterized by oval defects of the parietal bones caused by deficient ossification around the parietal notch, which is normally obliterated during the fifth fetal month.

Defects in MSX2 are the cause of parietal foramina with cleidocranial dysplasia (PFMCCD) [MIM:168550]; also known as cleidocranial dysplasia with parietal foramina. PFMCCD combines skull defects in the form of enlarged parietal foramina and deficient ossification of the clavicles.

Defects in MSX2 are the cause of craniosynostosis type 2 (CRS2) [MIM:604757]; also known as craniosynostosis Boston-type (CSB). CRS2 is an autosomal dominant disorder characterized by the premature fusion of calvarial sutures. The craniosynostosis phenotype is either fronto-orbital recession, or frontal bossing, or turribrachycephaly, or cloverleaf skull. Associated features include severe headache, high incidence of visual problems (myopia or hyperopia), and short first metatarsals. Intelligence is normal.

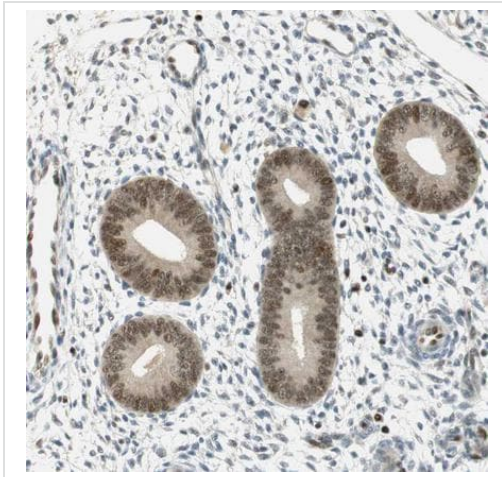
Sequence similarities

Belongs to the Msh homeobox family.
Contains 1 homeobox DNA-binding domain.

Cellular localization

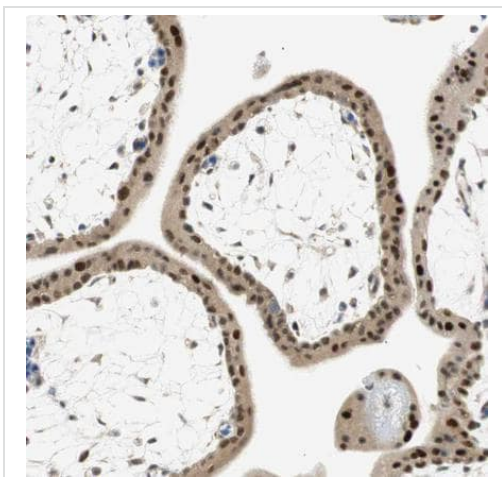
Nucleus.

Images



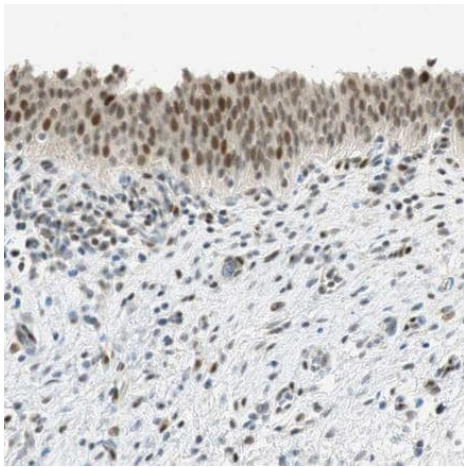
Formalin-fixed, paraffin-embedded human endometrium tissue stained for Msx2/Hox8 using ab223692 at 1/50 dilution in immunohistochemical analysis.

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Msx2/Hox8 antibody (ab223692)



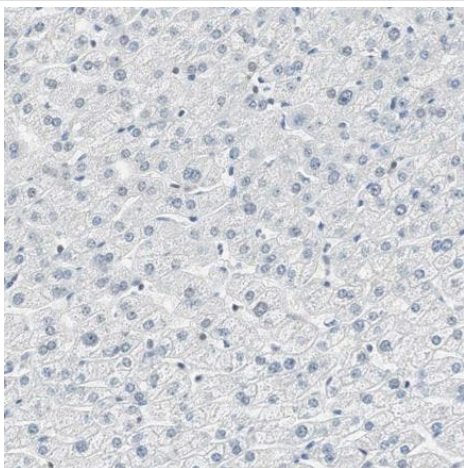
Formalin-fixed, paraffin-embedded human placenta tissue stained for Msx2/Hox8 using ab223692 at 1/50 dilution in immunohistochemical analysis.

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Msx2/Hox8 antibody (ab223692)



Formalin-fixed, paraffin-embedded human urinary bladder tissue stained for Msx2/Hox8 using ab223692 at 1/50 dilution in immunohistochemical analysis.

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Msx2/Hox8 antibody (ab223692)



Formalin-fixed, paraffin-embedded human endometrium tissue stained for Msx2/Hox8 using ab223692 at 1/50 dilution in immunohistochemical analysis. Low positivity, as expected.

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Msx2/Hox8 antibody (ab223692)

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

Our Abpromise to you: Quality guaranteed and expert technical support

- Replacement or refund for products not performing as stated on the datasheet
- Valid for 12 months from date of delivery
- Response to your inquiry within 24 hours
- We provide support in Chinese, English, French, German, Japanese and Spanish
- Extensive multi-media technical resources to help you

- We investigate all quality concerns to ensure our products perform to the highest standards

If the product does not perform as described on this datasheet, we will offer a refund or replacement. For full details of the Abpromise, please visit <https://www.abcam.com/abpromise> or contact our technical team.

Terms and conditions

- Guarantee only valid for products bought direct from Abcam or one of our authorized distributors