

### Msx2 Antibody (C-term)

Affinity Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP2709B

## **Specification**

## Msx2 Antibody (C-term) - Product Information

Application WB, IHC-P,E **Primary Accession** P35548 Reactivity Human Host **Rabbit** Clonality **Polyclonal** Isotype Rabbit IgG Calculated MW 28897 Antigen Region 191-222

## Msx2 Antibody (C-term) - Additional Information

#### **Gene ID 4488**

### **Other Names**

Homeobox protein MSX-2, Homeobox protein Hox-8, MSX2, HOX8

## **Target/Specificity**

This Msx2 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 191-222 amino acids from the C-terminal region of human Msx2.

#### **Dilution**

WB~~1:1000 IHC-P~~1:10~50

E~~Use at an assay dependent concentration.

### **Format**

Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.

#### Storage

Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

## **Precautions**

Msx2 Antibody (C-term) is for research use only and not for use in diagnostic or therapeutic procedures.

## Msx2 Antibody (C-term) - Protein Information

### Name MSX2

## **Synonyms HOX8**





**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.

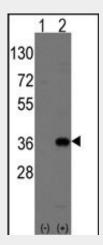
**Cellular Location** Nucleus.

## Msx2 Antibody (C-term) - Protocols

Provided below are standard protocols that you may find useful for product applications.

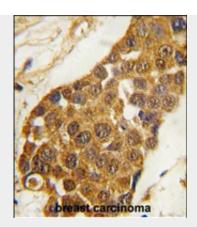
- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

## Msx2 Antibody (C-term) - Images



Western blot analysis of Msx2 (arrow) using rabbit polyclonal Msx2 Antibody (Human C-term) (Cat.#AP2709b). 293 cell lysates (2 ug/lane) either nontransfected (Lane 1) or transiently transfected with the Msx2 gene (Lane 2) (Origene Technologies).





Formalin-fixed and paraffin-embedded human breast carcinoma tissue reacted with Msx2 Antibody (C-term) (Cat.#AP2709b), which was peroxidase-conjugated to the secondary antibody, followed by DAB staining. This data demonstrates the use of this antibody for immunohistochemistry; clinical relevance has not been evaluated.

# Msx2 Antibody (C-term) - Background

This gene encodes a member of the muscle segment homeobox gene family. The encoded protein is a transcriptional repressor whose normal activity may establish a balance between survival and apoptosis of neural crest-derived cells required for proper craniofacial morphogenesis. The encoded protein may also have a role in promoting cell growth under certain conditions and may be an important target for the RAS signaling pathways. Mutations in this gene are associated with parietal foramina 1 and craniosynostosis type 2.

## Msx2 Antibody (C-term) - References

Shao, J.S., Ann. N. Y. Acad. Sci. 1117, 40-50 (2007) Han, J., Mech. Dev. 124 (9-10), 729-745 (2007) Ghassibe, M., Eur. J. Pediatr. 165 (10), 734-735 (2006)