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MSX1 Antibody (Center)

Affinity Purified Rabbit Polyclonal Antibody (Pab)

Catalog # AP19261C

Specification

MSX1 Antibody (Center) - Product Information

Application	IF, WB,E
Primary Accession	P28360
Other Accession	O02786, NP_002439.2
Reactivity	Human, Mouse
Predicted	Bovine
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit Ig
Antigen Region	111-138

MSX1 Antibody (Center) - Additional Information

Gene ID 4487

Other Names
Homeobox protein MSX-1, Homeobox protein Hox-7, Msh homeobox 1-like protein, MSX1, HOX7

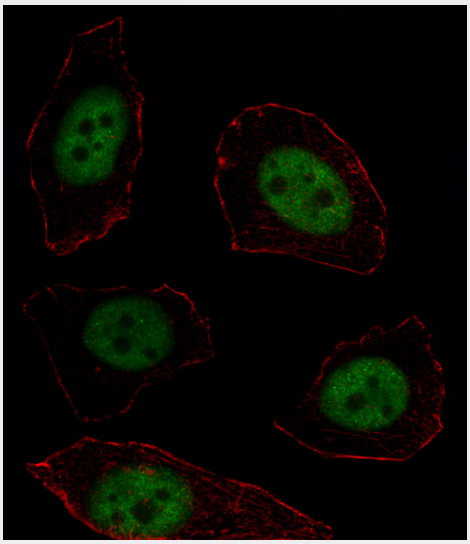
Target/Specificity
This MSX1 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 111-138 amino acids from the Central region of human MSX1.

Dilution
IF~~1:200
WB~~1:1000

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



Fluorescent image of U251 cell stained with MSX1 Antibody (Center)(Cat#AP19261c).U251 cells were fixed with 4% PFA (20 min), permeabilized with Triton X-100 (0.1%, 10 min), then incubated with MSX1 primary antibody (1:25, 1 h at 37℃). For secondary antibody, Alexa Fluor® 488 conjugated donkey anti-rabbit antibody (green) was used (1:400, 50 min at 37℃).Cytoplasmic actin was counterstained with Alexa Fluor® 555 (red) conjugated Phalloidin (7units/ml, 1 h at 37℃).MSX1 immunoreactivity is localized to Nucleus significantly.

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MSX1 Antibody (Center) is for research use only and not for use in diagnostic or therapeutic procedures.

MSX1 Antibody (Center) - Protein Information

Name MSX1

Synonyms HOX7

Function
Acts as a transcriptional repressor. May play a role in limb- pattern formation. Acts in cranofacial development and specifically in odontogenesis. Expression in the developing nail bed mesenchyme is important for nail plate thickness and integrity.

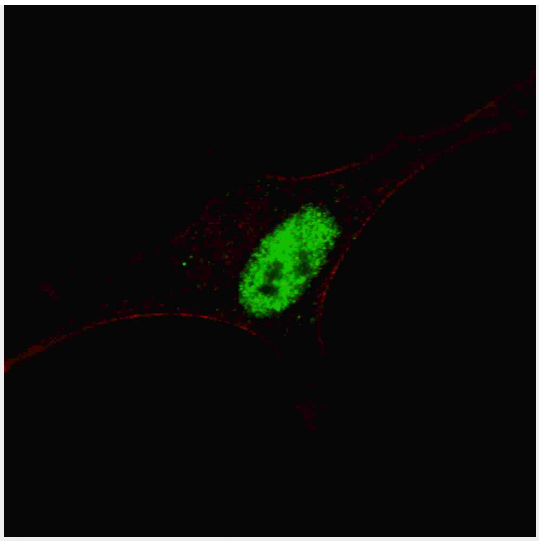
Cellular Location
Nucleus.

Tissue Location
Expressed in the developing nail bed mesenchyme.

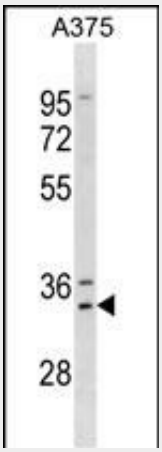
MSX1 Antibody (Center) - Protocols

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



Fluorescent confocal image of SY5Y cells stained with MSX1 (Center) antibody. SY5Y cells were fixed with 4% PFA (20 min), permeabilized with Triton X-100 (0.2%, 30 min). Cells were then incubated with AP19261c MSX1 (Center) primary antibody (1:200, 2 h at room temperature). For secondary antibody, Alexa Fluor® 488 conjugated donkey anti-rabbit antibody (green) was used (1:1000, 1h). Nuclei were counterstained with Hoechst 33342 (blue) (10 µg/ml, 5 min). Note the highly specific localization of the MSX1 mainly to the nucleus.



MSX1 Antibody (Center)(Cat. #AP19261c) western blot analysis in A375 cell line lysates (35ug/lane).This demonstrates the MSX1 antibody detected the MSX1 protein (arrow).

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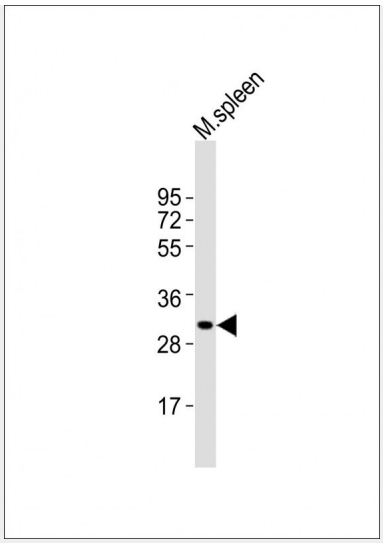
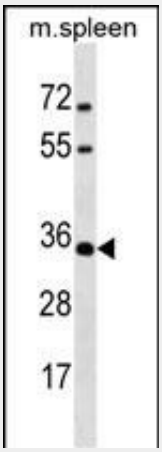


Anti-MSX1 Antibody (Center)at 1:2000 dilution + mouse spleen lysates Lysates/proteins at 20 µg per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/10000 dilution Predicted band size : 31 kDa Blocking/Dilution buffer: 5% NFDM/TBST.



MSX1 Antibody (Center) (Cat. #AP19261c) western blot analysis in mouse spleen tissue lysates (35ug/lane).This demonstrates the MSX1 antibody detected the MSX1 protein (arrow).

MSX1 Antibody (Center) - Background

This gene encodes a member of the muscle segment homeobox
gene family. The encoded protein functions as a transcriptional
repressor during embryogenesis through interactions with components
of the core transcription complex and other homeoproteins. It may

also have roles in limb-pattern formation, craniofacial
development, particularly odontogenesis, and tumor growth
inhibition. Mutations in this gene, which was once known as
homeobox 7, have been associated with nonsyndromic cleft lip with
or without cleft palate 5, Witkop syndrome, Wolf-Hirschom syndrome,
and autosomoal dominant hypodontia.

MSX1 Antibody (Center) - References

References for protein:
1.Sliwinski, T., et al. Cancer Epidemiol 34(5):652-655(2010)
2.Nikopensius, T., et al. Birth Defects Res. Part A Clin. Mol. Teratol. 88(9):748-756(2010)
3.Suazo, J., et al. Am. J. Med. Genet. A 152A (8), 2011-2016 (2010) :
4.Doi, T., et al. J. Pediatr. Surg. 45(6):1187-1191(2010)
5.Jugessur, A., et al. PLoS ONE 5 (7), E11493 (2010)
References for SY5Y (SH-SY5Y; ATCC#CRL-2266): 1. Ross RA, et al. Coordinate morphological and biochemical interconversion of human neuroblastoma cells. J. Natl. Cancer Inst. 71: 741-749, 1983. [PubMed: 6137586]; 2. Biedler JL, et al. Multiple neurotransmitter synthesis by human neuroblastoma cell lines and clones. Cancer Res. 38: 3751-3757, 1978. [PubMed: 29704].