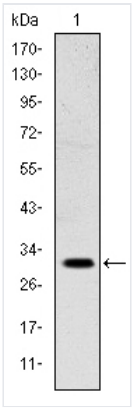
MSX1 Antibody – Mouse Monoclonal

PRODUCT OVERVIEW

Product Name	MSX1, Monoclonal Antibody
Full Product Name	MSX1 Antibody
Product Gene Name	anti-MSX1 antibody
Product Synonym Names	AA675338 antibody; AI324650 antibody; Homeobox 7 antibody; Homeobox protein Hox-7 antibody; Homeobox protein MSX 1 antibody; Homeobox protein MSX-1 antibody; Homeobox protein MSX1 antibody; Homeobox; msh like 1 antibody; Homeobox; msh-like 1 antibody; HOX 7 antibody; Hox 7.1 antibody; Hox-7 antibody; HOX7 antibody; Hox7.1 antibody; HYD 1 antibody; HYD1 antibody; msh (Drosophila) homeo box homolog 1 (formerly homeo box 7) antibody; Msh antibody; msh homeo box 1 antibody; msh homeo box homolog 1 antibody; Msh homeobox 1 antibody; Msh homeobox 1 like protein antibody; Msh homeobox 1-like protein antibody; msh homeobox homolog 1 (Drosophila) antibody; msh homeobox homolog 1 antibody; MSH; Drosophila; Homolog of; 1 antibody; MSX 1 antibody; MSX1 antibody; MSX1_HUMAN antibody; Muscle segment homeobox antibody; Muscle segment homeobox; Drosophila; Homolog of; 1 antibody; OFC5 antibody; OTTHUMP00000115387 antibody; STHAG1 antibody
Clonality	Monoclonal
Clone Number	D11-A8
Host	Mouse
Species Reactivity	Human
Form/Format	1*TBS (pH7.4), 1%BSA, Preservative: 0.05% Sodium Azide.
Purity/Purification	ProA affinity purified
Preparation and Storage	Store at -20 degree C.
Molecular Weight	31,496 Da
OMIM	phenotype 608874
3D Structure	ModBase 3D Structure for P28360
Immunogen	Recombinant protein
Conjugation	Unconjugated
Product Categories/Family for anti-MSX1 antibody	Total protein Ab
Applications Tested/Suitable for anti-MSX1 antibody	Western Blot (WB)
Application Notes for anti-MSX1 antibody	WB: 1:500-1:1000
Related Product Information for anti-MSX1 antibody	Drosophila, muscle segment (msh) homolog 1, homeo domain encoding gene, inhibiting MYOD1 expression, highly expressed in dental mesenchyme during critical bud stage, involved in epithelial-mesenchymal signaling in many organs, and in the pathogenesis of cleft lip and palate, interacting with MSX2 in mouse limb bud patterning.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.Tissue specificity: Expressed in the developing nail bed mesenchyme.

Other Notes	Small volumes of anti-MSX1 antibody vial(s) may occasionally become entrapped in the seal of the product vial during shipment and storage. If necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the container`s cap. Certain products may require to ship with dry ice and additional dry ice fee may apply.
Searchable Terms for MSX1 purchase	MBS9435335 is an antibody targeting MSX1. Also known as MSX1 Antibody. Reactive in Human. Host: Mouse.



Western Blot (WB) of anti-MSX1 antibody
Western blot analysis of MSX1 on NTERA-2 cell lysate using anti-MSX1 antibody at 1/1, 000 dilution.

ADDITIONAL DETAILS

NCBI/Uniprot data below describe general gene information for MSX1. It may not necessarily be applicable to this product.

NCBI GI #	118582284
NCBI GeneID	4487
NCBI Accession #	NP_002439.2
UniProt Primary Accession #	P28360
UniProt Secondary Accession #	Q96NY4; A0SZU5; A8K3M1
UniProt Related Accession #	P28360
GenBank Nucleotide #	NM_002448.3
NCBI Official Full Name	homeobox protein MSX-1
NCBI Official Synonym Full Names	msh homeobox 1
NCBI Official Symbol	MSX1
NCBI Official Synonym Symbols	HOX7; HYD1; ECTD3; STHAG1
UniProt Protein Name	Homeobox protein MSX-1
UniProt Synonym Protein Names	Homeobox protein Hox-7; Msh homeobox 1-like protein
Protein Family	Homeobox protein
UniProt Gene Name	MSX1
UniProt Synonym Gene Names	HOX7
UniProt Entry Name	MSX1_HUMAN
NCBI Protein Information	homeobox protein MSX-1; homeobox 7; msh homeo box 1; homeobox protein Hox-7; msh homeobox homolog 1; msh homeobox 1-like protein

NCBI Summary for MSX1	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. [provided by RefSeq, Jul 2008]
UniProt Comments for MSX1	MSX1: 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. Expressed in the developing nail bed mesenchyme. Belongs to the Msh homeobox family. Protein type: Motility/polarity/chemotaxis; DNA-binding Chromosomal Location of Human Ortholog: 4p16.2 Cellular Component: nucleoplasm; transcription factor complex; cytoplasm; nucleus Molecular Function: p53 binding Biological Process: embryonic forelimb morphogenesis; negative regulation of striated muscle cell differentiation; transcription from RNA polymerase II promoter; muscle development; protein stabilization; in utero embryonic development; regulation of odontogenesis; mesenchymal cell proliferation; cell morphogenesis; negative regulation of transcription from RNA polymerase II promoter; palate development; middle ear morphogenesis; embryonic hindlimb morphogenesis; odontogenesis of dentine-containing teeth; anterior/posterior pattern formation; negative regulation of cell proliferation; pituitary gland development; midbrain development; positive regulation of transcription from RNA polymerase II promoter; positive regulation of DNA damage response, signal transduction by p53 class mediator; negative regulation of cell growth; positive regulation of BMP signaling pathway; negative regulation of apoptosis Disease: Orofacial Cleft 5; Witkop Syndrome; Tooth Agenesis, Selective, 1
Research Articles on MSX1	**1.** novel nonsense mutation (c.416G>A) in exon 1 of MSX1 from family with oligodontia. produced termination codon in 1st exon and gene product (W139X) truncated at C terminus; entire homeodomain/MH4 absent. W139X MSX1 responsible for tooth agenesis.
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