

Product name:	Msx-2 Rabbit Polyclonal Antibody
Cat number:	ABN14192
Conjugate:	Unconjugated
Size:	100μL
Clone:	Polyclonal
Concentration:	1mg/ml
Host:	Rabbit
Isotype:	IgG
Immunogen:	Synthesized peptide derived from the Internal region of human Msx-2.
Reactivity:	Human, Mouse
Applications:	WB 1:500-1:2000, IHC 1:100-1:300, ICC/IF 1:50-1:200, ELISA 1:10000-1:20000
Molecular Weight:	28kDa
Purification:	Affinity purification
Form:	Liquid
Buffer:	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% New type preservative N.
Storage:	Store at 4°C short term. Aliquot and store at -20°C for 12 months. Avoid freeze/thaw cycles.

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. [provided by RefSeq, Jul 2008],disease: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.,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.,disease: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.,function:Probable morphogenetic role. May play a role in limb-pattern formation. In osteoblasts, suppresses transcription driven by the osteocalcin FGF response element (OCFRE).,similarity:Belongs to the Msh homeobox family.,similarity:Contains 1 homeobox DNA-binding domain.,subunit:Interacts with MINT (By similarity). Interacts with G22P1 (Ku70) and XRCC5 (Ku80).