

## Immunotag™ Msx-2 Polyclonal Antibody

Antibody Specification	
Catalog No.	ITT2905
Product Description	Immunotag™ Msx-2 Polyclonal Antibody
Size	50 µg, 100 µg
Conjugation	HRP, Biotin, FITC, Alexa Fluor® 350, Alexa Fluor® 405, Alexa Fluor® 488, Alexa Fluor® 555, Alexa Fluor® 594, Alexa Fluor® 647
IMPORTANT NOTE	This product is custom manufactured with a lead time of 3-4 weeks. Once in production, this item cannot be cancelled from an order and is not eligible for return.
Target Protein	MSX2
Clonality	Polyclonal
Storage/Stability	-20°C/1 year
Application	WB,IHC-p,ELISA
Recommended Dilution	Western Blot: 1/500 - 1/2000. Immunohistochemistry: 1/100 - 1/300. ELISA: 1/20000. Not yet tested in other applications.
Concentration	1 mg/ml
Reactive Species	Human,Mouse
Host Species	Rabbit
Immunogen	Synthesized peptide derived from the Internal region of human Msx-2.
Specificity	Msx-2 Polyclonal Antibody detects endogenous levels of Msx-2 protein.
Purification	The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen
Form	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.
Gene Name	MSX2
Accession No.	P35548 Q03358
Alternate Names	MSX2; HOX8; Homeobox protein MSX-2; Homeobox protein Hox-8

## Antibody Specification

Description	msh homeobox 2(MSX2) Homo sapiens 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],
Protein Expression	Osteoblast,Pancreas,Tooth,
Subcellular Localization	nucleus,
Protein Function	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).,
Usage	For Research Use Only! Not for diagnostic or therapeutic procedures.