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Rabbit Anti-MESP2 antibody

SL18796R

Product Name:	MESP2
Chinese Name:	碱性螺旋环螺旋蛋白MESP2抗体
Alias:	Basic helix loop helix protein MESP 2; Basic helix loop helix protein MESP2; BHLH protein MesP2; bHLHc6; Class C basic helix-loop-helix protein 6; Hypothetical class II basic helix loop helix protein MESP 2; Hypothetical class II basic helix loop helix protein MESP2; Mesoderm posterior 2; mesoderm posterior 2 homolog (mouse); Mesoderm posterior 2 homolog; Mesoderm posterior protein 2; Mesp 2; MESP2; MESP2_HUMAN; SCDO 2; SCDO2.
Organism Species:	Rabbit
Clonality:	Polyclonal
React Species:	Human,Mouse,Rat,Dog,
Applications:	ELISA=1:500-1000IHC-P=1:400-800IHC-F=1:400-800ICC=1:100-500IF=1:100-500（Paraffin sections need antigen repair） not yet tested in other applications. optimal dilutions/concentrations should be determined by the end user.
Molecular weight:	42kDa
Cellular localization:	The nucleus
Form:	Lyophilized or Liquid
Concentration:	1mg/ml
immunogen:	KLH conjugated synthetic peptide derived from human MESP2:311-397/397
Lsotype:	IgG
Purification:	affinity purified by Protein A
Storage Buffer:	0.01M TBS(pH7.4) with 1% BSA, 0.03% Proclin300 and 50% Glycerol.
Storage:	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. The lyophilized antibody is stable at room temperature for at least one month and for greater than a year when kept at -20°C. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.
PubMed:	PubMed
Product Detail:	This gene encodes a member of the bHLH family of transcription factors and plays a key role in defining the rostrocaudal patterning of somites via interactions with multiple

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Notch signaling pathways. This gene is expressed in the anterior presomitic mesoderm and is downregulated immediately after the formation of segmented somites. This gene also plays a role in the formation of epithelial somitic mesoderm and cardiac mesoderm. Mutations in the MESP2 gene cause autosomal recessive spondylocostal dystosis 2 (SCD02). [provided by RefSeq, Oct 2008]

Function:
Transcription factor with important role in somitogenesis. Defines the rostrocaudal patterning of the somite by participating in distinct Notch pathways. Regulates also the FGF signaling pathway. Specifies the rostral half of the somites. Generates rostro-caudal polarity of somites by down-regulating in the presumptive rostral domain DLL1, a Notch ligand. Participates in the segment border formation by activating in the anterior presomitic mesoderm LFNG, a negative regulator of DLL1-Notch signaling. Acts as a strong suppressor of Notch activity. Together with MESP1 is involved in the epithelialization of somitic mesoderm and in the development of cardiac mesoderm.

Subcellular Location:
Nucleus.

Post-translational modifications:
Degraded by the proteasome.

DISEASE:
Defects in MESP2 are the cause of spondylocostal dysostosis type 2 (SCDO2) [MIM:608681]. An autosomal recessive condition of variable severity associated with vertebral and rib segmentation defects. The main skeletal malformations include fusion of vertebrae, hemivertebrae, fusion of certain ribs, and other rib malformations. Deformity of the chest and spine (severe scoliosis, kyphoscoliosis and lordosis) is a natural consequence of the malformation and leads to a dwarf-like appearance. As the thorax is small, infants frequently have respiratory insufficiency and repeated respiratory infections resulting in life-threatening complications in the first year of life.

Similarity:
Contains 1 bHLH (basic helix-loop-helix) domain.

SWISS:
Q0VG99

Gene ID:
145873

Database links:

Entrez Gene: 145873 Human

Omim: 605195 Human

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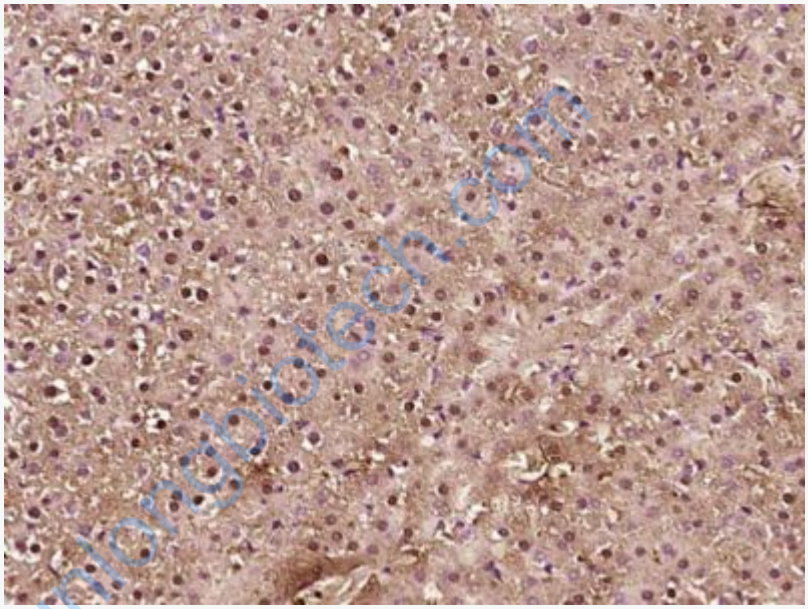
	SwissProt: Q0VG99 Human Unigene: 37311 Human **Important Note:** This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.
Picture:	 Paraformaldehyde-fixed, paraffin embedded (Rat liver); Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15min; Block endogenous peroxidase by 3% hydrogen peroxide for 20 minutes; Blocking buffer (normal goat serum) at 37°C for 30min; Antibody incubation with (MESP2) Polyclonal Antibody, Unconjugated (SL18796R) at 1:400 overnight at 4°C, followed by operating according to SP Kit(Rabbit) (sp-0023) instructionsand DAB staining.

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