

MESP2 Rabbit pAb

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Catalog # AP57255

Product Information

Application	IHC-P, IHC-F, IF
Primary Accession	Q0VG99
Reactivity	Rat
Predicted	Dog, Human, Mouse
Host	Rabbit
Clonality	Polyclonal
Calculated MW	41760
Physical State	Liquid
Immunogen	KLH conjugated synthetic peptide derived from human MESP2
Epitope Specificity	311-397/397
Isotype	IgG
Purity	affinity purified by Protein A
Buffer	0.01M TBS (pH7.4) with 1% BSA, 0.02% Proclin300 and 50% Glycerol.
SUBCELLULAR LOCATION	Nucleus.
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.
Important Note	This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.
Background Descriptions	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 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 (SCDO2). [provided by RefSeq, Oct 2008]

Additional Information

Gene ID	145873
Other Names	Mesoderm posterior protein 2, Class C basic helix-loop-helix protein 6, bHLHc6, MESP2, BHLHC6, SCDO2

Dilution	IHC-P=1:100-500,IHC-F=1:100-500,IF=1:100-500
Storage	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. 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.

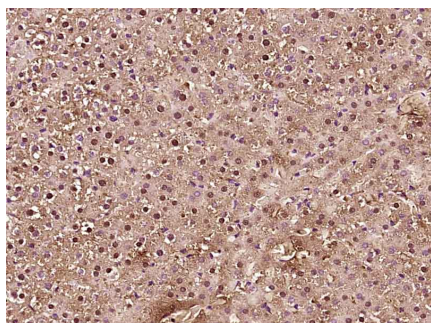
Protein Information

Name	MESP2
Synonyms	BHLHC6, SCDO2
Function	Transcription factor with important role in somitogenesis. Defines the rostrocaudal patterning of the somite by participating in distinct Notch pathways. Also regulates 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.
Cellular Location	Nucleus {ECO:0000255 PROSITE-ProRule:PRU00981}.

Background

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Images



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 (AP57255) at 1:400 overnight at 4°C, followed by operating according to SP Kit(Rabbit) (sp-0023) instructions and DAB staining.

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.