

MESP2 Antibody

Purified Mouse Monoclonal Antibody

Catalog # AO1789a

Product Information

Application	WB, E
Primary Accession	Q0VG99
Reactivity	Human
Host	Mouse
Clonality	Monoclonal
Clone Names	1B3F9
Isotype	IgG1
Calculated MW	41760
Description	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 (SCD02).
Immunogen	Purified recombinant fragment of human MESP2 (AA: 37-94) expressed in E. Coli.
Formulation	Purified antibody in PBS with 0.05% sodium azide

Additional Information

Gene ID	145873
Other Names	Mesoderm posterior protein 2, Class C basic helix-loop-helix protein 6, bHLHc6, MESP2, BHLHC6, SCDO2
Dilution	WB~~1/500 - 1/2000 E~~1/10000
Storage	Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.
Precautions	MESP2 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	MESP2
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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

The product of this gene belongs to the family of G-protein coupled receptors. This family has several receptor subtypes with different pharmacological selectivity, which overlaps in some cases, for various adenosine and uridine nucleotides. This receptor is activated by ADP. ;

References

1.Stud Health Technol Inform. 2012;176:52-5. 2.Am J Hum Genet. 2008 Jun;82(6):1334-41.

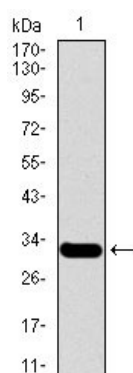
Images

Figure 1: Western blot analysis using MESP2 mAb against human MESP2 recombinant protein. (Expected MW is 31.4 kDa)

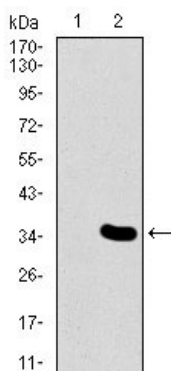


Figure 2: Western blot analysis using MESP2 mAb against HEK293 (1) and MESP2 (AA: 37-94)-hIgGfc transfected HEK293 (2) cell lysate.

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