

MESP2 Antibody

Purified Mouse Monoclonal Antibody Catalog # AO1789a

Specification

MESP2 Antibody - Product Information

Application Primary Accession Reactivity Host Clonality Isotype Calculated MW **Description** E, WB <u>O0VG99</u> Human Mouse Monoclonal IgG1 41.8kDa KDa

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

MESP2 Antibody - Additional Information

Gene ID 145873

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

Dilution E~~1/10000 WB~~1/500 - 1/2000

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.

MESP2 Antibody - 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. 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.

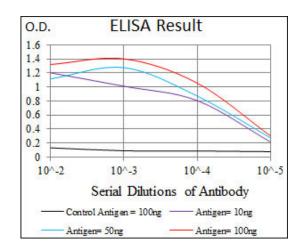
Cellular Location

Nucleus {ECO:0000255|PROSITE-ProRule:PRU00981}.

MESP2 Antibody - Protocols

Provided below are standard protocols that you may find useful for product applications.

- <u>Western Blot</u>
- Blocking Peptides
- <u>Dot Blot</u>
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- <u>Cell Culture</u>



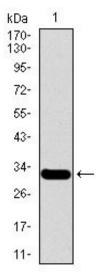


Figure 1: Western blot analysis using MESP2 mAb against human MESP2 recombinant protein. (Expected MW is 31.4 kDa)

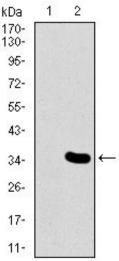


Figure 2: Western blot analysis using MESP2 mAb against HEK293 (1) and MESP2 (AA: 37-94)-hlgGFc transfected HEK293 (2) cell lysate.

MESP2 Antibody - 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. ;

MESP2 Antibody - References

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