

Rabbit anti-Human Mesp2 Polyclonal Antibody | anti-MESP2 antibody

Anti-Mesp2 Antibody

CATALOG #	HOST	REACTIVITY	APPLICATIONS
AAA125784	Rabbit	Human	ELISA, Flow Cytometry, Functional Assay, Immunofluorescence, Immunocytochemistry, Immunohistochemistry, Western Blot

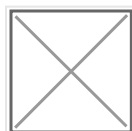
PRODUCT SYNONYMS

Mesp2; Polyclonal Antibody; Anti-Mesp2 Antibody; MESP2; BHLHC6; SCDO2; Mesoderm posterior protein 2; Class C basic helix-loop-helix protein 6; bHLHc6; mesoderm posterior bHLH transcription factor 2; anti-MESP2 antibody

PRODUCT SPECIFICATIONS

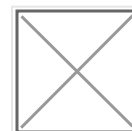
Host	Rabbit
Reactivity	Human
Clonality	Polyclonal
Isotype	Rabbit IgG
Specificity	Rabbit IgG polyclonal antibody for Mesp2 detection.
Purity/Purification	Immunogen affinity purified.
Form/Format	Lyophilized. Each vial contains 4mg Trehalose, 0.9mg NaCl, 0.2mg Na2HPO4, 0.01mg NaN3.
Applicable Applications for anti-MESP2 antibody	ELISA (Direct ELISA), FCM/FACS (Flow Cytometry), IF (Immunofluorescence), ICC (Immunocytochemistry), IHC (Immunohistochemistry), WB (Western Blot)
Immunogen	E Coli-derived human Mesp2 recombinant protein (Position: M1-Y397).
Reconstitution	Add 0.2ml of distilled water will yield a concentration of 500ug/ml.
Recommended Detection Systems	Recommended Detection Systems
Preparation and Storage	Store at -20 degree C for one year. After reconstitution, at 4 degree C for one month. It can also be aliquotted and stored frozen at -20 degree C for a longer time. Avoid repeated freezing and thawing.

IMAGES



FCM/FACS (Flow Cytometry)

Figure 5. Flow Cytometry analysis of SiHa cells using anti-Mesp2 antibody (AAA125784). Overlay histogram showing SiHa cells stained with AAA125784 (Blue line). The cells were blocked with 10% normal goat serum. And then incubated with rabbit anti-Mesp2 Antibody (AAA125784, 1µg/1x10⁶ cells) for 30 min at 20 degree C. DyLight488 conjugated goat anti-rabbit IgG (5-10µg/1x10⁶ cells) was used as secondary antibody for 30 minutes at 20 degree C. Isotype control antibody (Green line) was rabbit IgG (1µg/1x10⁶) used under the same conditions. Unlabelled sample (Red line) was also used as a control.



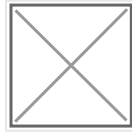
FCM/FACS (Flow Cytometry)

Figure 4. Flow Cytometry analysis of K562 cells using anti-Mesp2 antibody (AAA125784). Overlay histogram showing K562 cells stained with AAA125784 (Blue line). The cells were blocked with 10% normal goat serum. And then incubated with rabbit anti-Mesp2 Antibody (AAA125784, 1µg/1x10⁶ cells) for 30 min at 20 degree C. DyLight488 conjugated goat anti-rabbit IgG (5-10µg/1x10⁶ cells) was used as secondary antibody for 30 minutes at 20 degree C. Isotype control antibody (Green line) was rabbit IgG (1µg/1x10⁶) used under the same conditions. Unlabelled sample (Red line) was also used as a control.



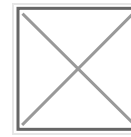
IF (Immunofluorescence)

Figure 3. IF analysis of Mesp2 using anti-Mesp2 antibody (AAA125784). Mesp2 was detected in immunocytochemical section of A549 cells. Enzyme antigen retrieval was performed using IHC enzyme antigen retrieval reagent for 15 mins. The cells were blocked with 10% goat serum. And then incubated with 5µg/mL rabbit anti-Mesp2 Antibody (AAA125784) overnight at 4 degree C. DyLight®488 Conjugated Goat Anti-Rabbit IgG was used as secondary antibody at 1:100 dilution and incubated for 30 minutes at 37 degree C. The section was counterstained with DAPI. Visualize using a fluorescence microscope and filter sets appropriate for the label used.



WB (Western Blot)

Figure 1. Western blot analysis of Mesp2 using anti-Mesp2 antibody (AAA125784). Electrophoresis was performed on a 5-20% SDS-PAGE gel at 70V (Stacking gel) / 90V (Resolving gel) for 2-3 hours. The sample well of each lane was loaded with 50µg of sample under reducing conditions. Lane 1: human placenta tissue lysates. Lane 2: human A549 whole cell lysates. Lane 3: human SW620 whole cell lysates. After Electrophoresis, proteins were transferred to a Nitrocellulose membrane at 150mA for 50-90 minutes. Blocked the membrane with 5% Non-fat Milk/ TBS for 1.5 hour at RT. The membrane was incubated with rabbit anti-Mesp2 antigen affinity purified polyclonal antibody (Catalog # AAA125784) at 0.5 µg/mL overnight at 4 degree C, then washed with TBS-0.1% Tween 3 times with 5 minutes each and probed with a goat anti-rabbit IgG-HRP secondary antibody at a dilution of 1:5000 for 1.5 hour at RT. The signal is developed using an Enhanced Chemiluminescent detection (ECL) kit with Tanon 5200 system. A specific band was detected for Mesp2 at approximately 45KD. The expected band size for Mesp2 is at 45KD.



IHC (Immunohistochemistry)

Figure 2. IHC analysis of Mesp2 using anti-Mesp2 antibody (AAA125784). Mesp2 was detected in paraffin-embedded section of human lung cancer tissue. Heat mediated antigen retrieval was performed in EDTA buffer (pH8.0, epitope retrieval solution). The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 2µg/mL rabbit anti-Mesp2 Antibody (AAA125784) overnight at 4 degree C. Biotinylated goat anti-rabbit IgG was used as secondary antibody and incubated for 30 minutes at 37 degree C. The tissue section was developed using Streptavidin-Biotin-Complex (SABC) with DAB as the chromogen.

ADDITIONAL INFORMATION

Related Product Information for anti-MESP2 antibody	Mesoderm posterior protein 2 (MESP2), also known as class C basic helix-loop-helix protein 6 (bHLHc6), is a protein that in humans is encoded by the MESP2 gene. 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).
References	<ol style="list-style-type: none">1. Cornier, A. S., Staehling-Hampton, K., Delventhal, K. M., Saga, Y., Caubet, J. -F., Sasaki, N., Ellard, S., Young, E., Ramirez, N., Carlo, S. E., Torres, J., Emans, J. B., Turnpenny, P. D., Pourquie, O. Mutations in the MESP2 gene cause spondylothoracic dysostosis/Jarcho-Levin syndrome. <i>Am. J. Hum. Genet.</i> 82: 1334-1341, 2008.2. Morimoto, M., Takahashi, Y., Endo, M., Saga, Y. The Mesp2 transcription factor establishes segmental borders by suppressing Notch activity. <i>Nature</i> 435: 354-359, 2005.3. Saga, Y., Hata, N., Koseki, H., Taketo, M. M. Mesp2: a novel mouse gene expressed in the presegmented mesoderm and essential for segmentation initiation. <i>Genes Dev.</i> 11: 1827-1839, 1997.

NCBI AND UNIPROT INFORMATION

NCBI GI #	90403598
NCBI GeneID	145873
NCBI Accession #	NP_001035047.1
NCBI GenBank Nucleotide #	NM_001039958.1
UniProt Accession #	Q0VG99 ; Q7RTU2
Molecular Weight	41.8
NCBI Official Full Name	mesoderm posterior protein 2

NCBI Official Synonym Full Names	mesoderm posterior bHLH transcription factor 2
NCBI Official Symbol	MESP2
NCBI Official Synonym Symbols	SCDO2; bHLHc6
NCBI Protein Information	mesoderm posterior protein 2
UniProt Protein Name	Mesoderm posterior protein 2
UniProt Gene Name	MESP2
UniProt Synonym Gene Names	BHLHC6; SCDO2; bHLHc6

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.

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Online datasheet: <https://stage.aaabiotech.com/polyclonal/mesp2-antibody-direct-elisa-flow-cytometry-immunofluorescence-immunocytochemistry-immunohistochemistry-western-blot-elisa/125784>