

Product datasheet for **AP33405PU-S**

MESP1 Rabbit Polyclonal Antibody

Product data:

Product Type:	Primary Antibodies
Applications:	IF, IHC, WB
Recommended Dilution:	Western blot (1-5 µg/ml). Immunofluorescence. Immunohistochemistry on Frozen Sections (1/200).
Reactivity:	Human
Host:	Rabbit
Clonality:	Polyclonal
Immunogen:	Highly pure (> 95%) recombinant Human MesP1 (Met1-Lys268) from produced in insect cells (Cat.-No AR31057PU-N).
Specificity:	This antibody detects Human MesP1. Other species not tested.
Formulation:	5mM PBS, pH 7.2 without preservatives or stabilizers State: Purified State: Lyophilized purified IgG fraction
Reconstitution Method:	Restore in sterile water to a concentration of 0.1-1.0 mg/ml. Centrifuge vial prior to opening.
Purification:	Protein A Chromatography
Conjugation:	Unconjugated
Storage:	Store lyophilized at 2-8°C for 6 months or at -20°C long term. After reconstitution store the antibody undiluted at 2-8°C for one month or (in aliquots) at -20°C long term. Avoid repeated freezing and thawing.
Stability:	Shelf life: one year from despatch.
Gene Name:	mesoderm posterior bHLH transcription factor 1
Database Link:	Entrez Gene 55897 Human Q9BRJ9



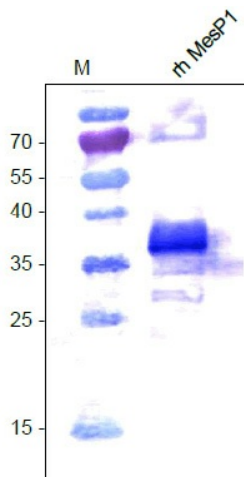
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Background:

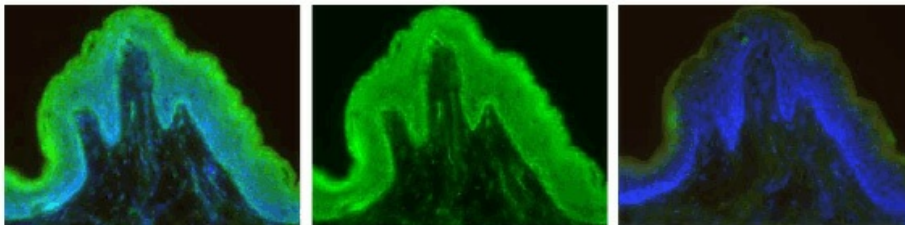
ES-cell-based cardiovascular repair requires an in-depth understanding of the molecular mechanisms underlying the differentiation of cardiovascular ES cells. A candidate cardiovascular-fate inducer is the bHLH transcription factor MesP1 (1,2). As one of the earliest markers, it is expressed specifically in almost all cardiovascular precursors and is required for cardiac morphogenesis (2,3). It was shown that MesP1 is a key factor sufficient to induce the formation of ectopic heart tissue in vertebrates and increase cardiovasculargenesis by ES cells. Electrophysiological analysis showed all subtypes of cardiac ES-cell differentiation (4). MesP1 overexpression and knockdown experiments revealed a prominent function of MesP1 in a gene regulatory cascade, causing Dkk-1-mediated blockade of canonical Wnt-signalling. Independent evidence from CHIP and in vitro DNA-binding studies, expression analysis in wild-type and MesP knockout mice, and reporter assays confirm that Dkk-1 is a direct target of MesP1.

Synonyms:

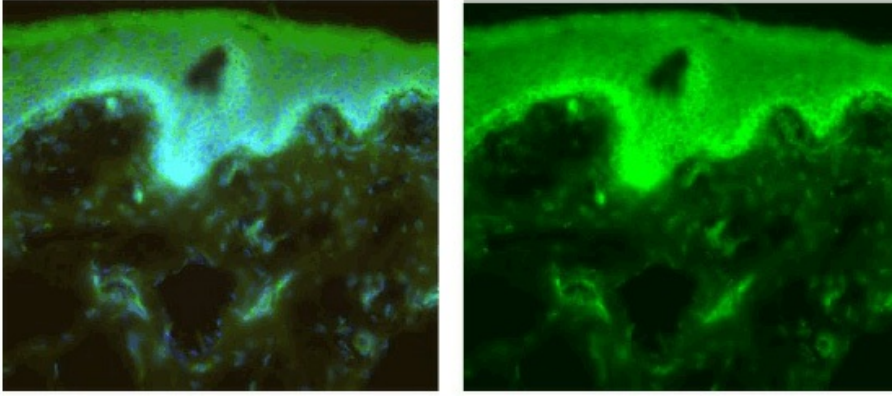
Mesoderm posterior protein 1

Product images:

Western Analysis of anti-Human MesP1. Sample was loaded in 15% SDS-polyacrylamide gel under reducing conditions.



Immunofluorescence staining of cryo-sections of unfixed human foreskin with anti-human MesP1 (dilution 1:100) and counter staining of nuclei with Dapi. Note: The specific green MesP1 signal is visible in the epidermis and in dermal blood vessels (left and middle picture). Right picture: Negative control without primary antibody.



Immunofluorescence staining of cryo-sections of unfixed human foreskin with anti-Human MesP1 Antibody (dilution 1:100) and counter staining of nuclei with Dapi. Note: The specific green MesP1 signal is visible in the epidermis and in dermal blood vessels. The experiment was performed by the research group of Prof. Dr. J. Wilting and Dr. K. Buttler, University Medicine Göttingen, Germany.