

HAND1 Monoclonal Antibody

Catalog No :	YM0323
Reactivity :	Human
Applications :	WB;ELISA
Target :	HAND1
Fields :	>>Signaling pathways regulating pluripotency of stem cells
Gene Name :	HAND1
Protein Name :	Heart- and neural crest derivatives-expressed protein 1
Human Gene Id :	9421
Human Swiss Prot No :	O96004
Mouse Swiss Prot No :	Q64279
Immunogen :	Purified recombinant fragment of HAND1 (aa90-190) expressed in E. Coli.
Specificity :	HAND1 Monoclonal Antibody detects endogenous levels of HAND1 protein.
Formulation :	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.
Source :	Monoclonal, Mouse
Dilution :	WB 1:500 - 1:2000. ELISA: 1:10000. Not yet tested in other applications.
Purification :	Affinity purification
Storage Stability :	-15°C to -25°C/1 year(Do not lower than -25°C)
Molecularweight :	24kD
P References :	1. J Biol Chem. 2002 Apr 12;277(15):12604-12.

Background :

The protein encoded by this gene belongs to the basic helix-loop-helix family of transcription factors. This gene product is one of two closely related family members, the HAND proteins, which are asymmetrically expressed in the developing ventricular chambers and play an essential role in cardiac morphogenesis. Working in a complementary fashion, they function in the formation of the right ventricle and aortic arch arteries, implicating them as mediators of congenital heart disease. In addition, it has been suggested that this transcription factor may be required for early trophoblast differentiation. [provided by RefSeq, Jul 2008],

Function :

function:Plays an essential role in early trophoblast differentiation and in cardiac morphogenesis. In the adult, could be required for ongoing expression of cardiac-specific genes. Binds the DNA sequence 5'-NRTCTG-3' (non-canonical E-box).,similarity:Contains 1 basic helix-loop-helix (bHLH) domain.,subunit:Efficient DNA binding requires dimerization with another bHLH protein. Forms homodimers and heterodimers with TCF3 gene products E12 and E47, HAND2 and HEY1, HEY2 and HEYL (hairy-related transcription factors).,tissue specificity:Heart.,

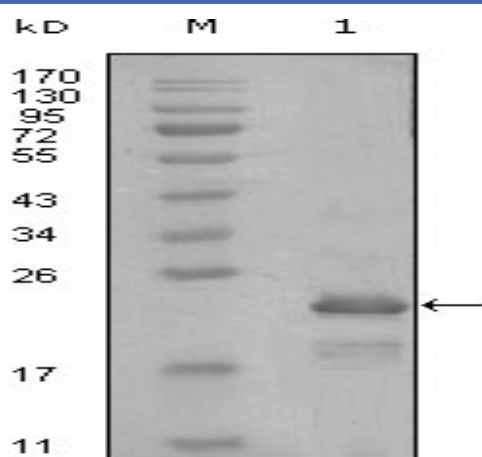
Subcellular Location :

Nucleus, nucleoplasm . Nucleus, nucleolus . Interaction with MDFIC sequesters it into the nucleolus, preventing the transcription factor activity. Phosphorylation by PLK4 disrupts the interaction with MDFIC and releases it from the nucleolus, leading to transcription factor activity (By similarity). .

Expression :

Heart.

Products Images



Western Blot analysis using HAND1 Monoclonal Antibody against truncated Trx-HAND1 recombinant protein (1).