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HAND1 Antibody

Purified Mouse Monoclonal Antibody
Catalog # AO1205a

Product Information

Application	WB, E
Primary Accession	O96004
Reactivity	Human
Host	Mouse
Clonality	Monoclonal
Clone Names	8E7A11; 8C2F4
Isotype	IgG1
Calculated MW	23627
Description	HAND1: heart and neural crest derivatives expressed 1. 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.
Immunogen	Purified recombinant fragment of HAND1 (aa90-190) expressed in E. Coli.
Formulation	Ascitic fluid containing 0.03% sodium azide.

Additional Information

Gene ID	9421
Other Names	Heart- and neural crest derivatives-expressed protein 1, Class A basic helix-loop-helix protein 27, bHLHa27, Extraembryonic tissues, heart, autonomic nervous system and neural crest derivatives-expressed protein 1, eHAND, HAND1, BHLHA27, EHAND
Dilution	WB~~1/500 - 1/2000 E~~N/A
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	HAND1 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	HAND1
Synonyms	BHLHA27, EHAND
Function	Transcription factor that plays an essential role in both trophoblast giant cell differentiation and in cardiac morphogenesis (By similarity). Binds the DNA sequence 5'-NRTCTG-3' (non-canonical E-box) (By similarity). Acts as a transcriptional repressor of SOX15 (By similarity). In the adult, could be required for ongoing expression of cardiac-specific genes (PubMed:9931445).
Cellular Location	Nucleus, nucleoplasm. Nucleus, nucleolus. Note=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).
Tissue Location	Heart.

References

1. J Biol Chem. 2002 Apr 12;277(15):12604-12. 2. Mol Cell. 2003 Nov;12(5):1225-37.

Images

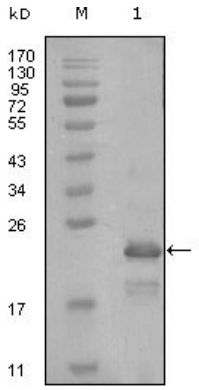


Figure 1: Western blot analysis using HAND1 mouse mAb against truncated Trx-HAND1 recombinant protein (1).

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