

HAND1 Antibody
Purified Mouse Monoclonal Antibody
Catalog # AO1205a**Specification**

HAND1 Antibody - Product Information

Application	WB
Primary Accession	O96004
Reactivity	Human
Host	Mouse
Clonality	Monoclonal
Isotype	IgG1

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.

HAND1 Antibody - 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

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.

HAND1 Antibody - 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.

HAND1 Antibody - Protocols

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

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

HAND1 Antibody - Images

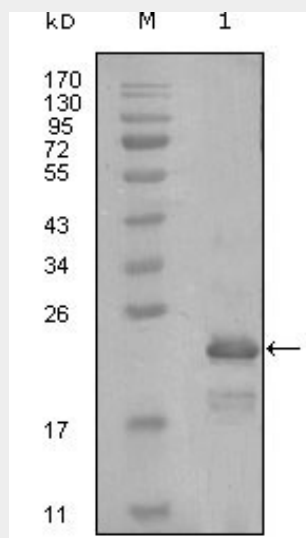


Figure 1: Western blot analysis using HAND1 mouse mAb against truncated Trx-HAND1 recombinant protein (1).

HAND1 Antibody - References

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