10320 Camino Santa Fe, Suite G
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Tel: 858.875.1900 Fax: 858.875.1999

HAND1 Antibody (Center)

Affinity Purified Rabbit Polyclonal Antibody (Pab)

Catalog # AW5092

Specification

HAND1 Antibody (Center) - Product Information

Application	**WB,E**
Primary Accession	O96004
Other Accession	P57100, Q0VCE2, NP_004812.1, Q28555
Reactivity	**Human**
Predicted	**Bovine, Rabbit, Sheep**
Host	**Rabbit**
Clonality	**Polyclonal**
Calculated MW	**H=24;Rat=24 KDa**
Isotype	**Rabbit IgG**
Antigen Source	**HUMAN**

HAND1 Antibody (Center) - Additional Information

Gene ID 9421

Antigen Region
76-105

Other Names
HAND1; BHLHA27; EHAND; Heart- and neural crest derivatives-expressed protein 1; Class A basic helix-loop-helix protein 27; Extraembryonic tissues, heart, autonomic nervous system and neural crest derivatives-expressed protein 1

Dilution
WB~~1:1000

Target/Specificity
This HAND1 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 76-105 amino acids from the Central region of human HAND1.

Format
Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.

Storage
Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions
HAND1 Antibody (Center) is for research use only and not for use in diagnostic or therapeutic procedures.

HAND1 Antibody (Center) - Protein Information

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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).

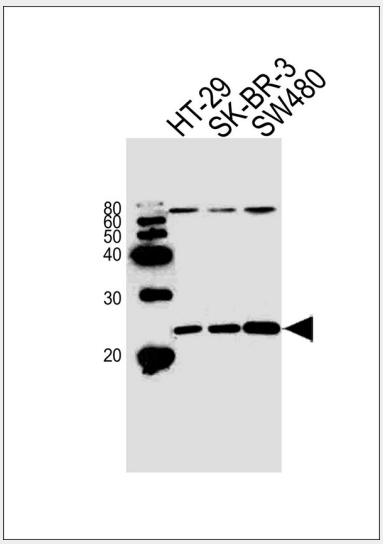
Tissue Location
Heart.

HAND1 Antibody (Center) - Protocols

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

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

HAND1 Antibody (Center) - Images



Western blot analysis of lysates from HT-29,SK-BR-3,SW480 cell line (from left to right), using

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HAND1 Antibody (Center)(Cat. #AW5092). AW5092 was diluted at 1:1000 at each lane. A goat anti-rabbit IgG H&L(HRP) at 1:10000 dilution was used as the secondary antibody.Lysates at 20ug per lane.

HAND1 Antibody (Center) - 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.

HAND1 Antibody (Center) - References

Reamon-Buettner, S.M., et al. Hum. Mol. Genet. 18(19):3567-3578(2009) Martinez Hoyos, J., et al. Oncogene 28(6):876-885(2009) Reamon-Buettner, S.M., et al. Hum. Mol. Genet. 17(10):1397-1405(2008) Morin, S., et al. J. Biol. Chem. 280(37):32272-32278(2005) Hill, A.A., et al. Mol. Cell. Biol. 24(22):9835-9847(2004)