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HAND1 Antibody (Center)

Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP14407c

Product Information

Application	WB, E
Primary Accession	O96004
Other Accession	P57100, Q0VCE2, NP_004812.1
Reactivity	Human, Rat
Predicted	Bovine, Rabbit
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Calculated MW	23627
Antigen Region	76-105

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
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.
Dilution	WB~~1:1000 E~~Use at an assay dependent concentration.
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.

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.

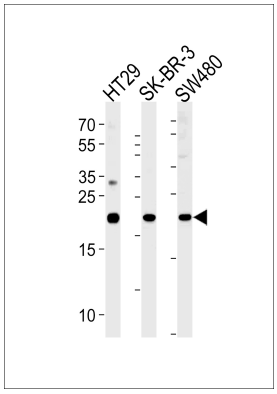
Background

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.

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)

Images



HAND1 Antibody (Center) (Cat. #AP14407c) western blot analysis in HT29,SK-BR-3,SW480 cell line lysates (35ug/lane).This demonstrates the HAND1 antibody detected the HAND1 protein (arrow).

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