

HAND2 Antibody (C-term)

Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP6117a

Specification

HAND2 Antibody (C-term) - Product Information

Application Primary Accession Other Accession Reactivity Predicted Host Clonality Isotype Antigen Region IHC-P, WB,E <u>P61296</u> <u>P61295, Q61039, P57102, NP_068808</u> Human Zebrafish, Mouse, Rat Rabbit Polyclonal Rabbit IgG 179-207

HAND2 Antibody (C-term) - Additional Information

Gene ID 9464

Other Names

Heart- and neural crest derivatives-expressed protein 2, Class A basic helix-loop-helix protein 26, bHLHa26, Deciduum, heart, autonomic nervous system and neural crest derivatives-expressed protein 2, dHAND, HAND2, BHLHA26, DHAND

Target/Specificity

This HAND2 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 179-207 amino acids from the C-terminal region of human HAND2.

Dilution IHC-P~~1:50~100 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 prepared by Saturated Ammonium Sulfate (SAS) precipitation followed by dialysis against PBS.

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

HAND2 Antibody (C-term) is for research use only and not for use in diagnostic or therapeutic procedures.

HAND2 Antibody (C-term) - Protein Information



Name HAND2

Synonyms BHLHA26, DHAND

Function Essential for cardiac morphogenesis, particularly for the formation of the right ventricle and of the aortic arch arteries. Required for vascular development and regulation of angiogenesis, possibly through a VEGF signaling pathway. Also plays an important role in limb development, particularly in the establishment of anterior- posterior polarization, acting as an upstream regulator of sonic hedgehog (SHH) induction in the limb bud. Is involved in the development of branchial arches, which give rise to unique structures in the head and neck. Binds DNA on E-box consensus sequence 5'-CANNTG- 3' (By similarity).

Cellular Location Nucleus {ECO:0000255|PROSITE-ProRule:PRU00981}.

Tissue Location Heart.

HAND2 Antibody (C-term) - Protocols

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

- <u>Western Blot</u>
- <u>Blocking Peptides</u>
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- <u>Cell Culture</u>

HAND2 Antibody (C-term) - Images



Western blot analysis of anti-HAND2 Antibody (C-term) (Cat.#AP6117a) in NCI-H460 cell line lysates (35ug/lane). HAND2(arrow) was detected using the purified Pab.





Formalin-fixed and paraffin-embedded human cancer tissue reacted with the primary antibody, which was peroxidase-conjugated to the secondary antibody, followed by AEC staining. This data demonstrates the use of this antibody for immunohistochemistry; clinical relevance has not been evaluated. BC = breast carcinoma; HC = hepatocarcinoma.

HAND2 Antibody (C-term) - Background

HAND2 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, this transcription factor plays an important role in limb and branchial arch development.

HAND2 Antibody (C-term) - References

McFadden, D.G., et al., Development 127(24):5331-5341 (2000). Firulli, A.B., et al., Nat. Genet. 18(3):266-270 (1998). Russell, M.W., et al., Biochim. Biophys. Acta 1443(3):393-399 (1998). Srivastava, D., Trends Cardiovasc Med 9 (1-2), 11-18 (1999). Srivastava, D., et al., Cold Spring Harb. Symp. Quant. Biol. 67, 121-125 (2002).